

THE PLACE OF MEETING

A Collection of Articles

ON

Canada, Manitoba
and Winnipeg

PREPARED FOR THE

98TH ANNUAL MEETING

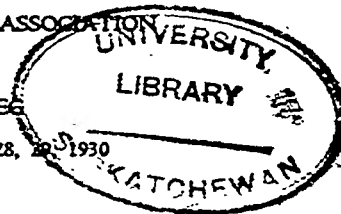
OF THE

BRITISH MEDICAL ASSOCIATION

AT

WINNIPEG

AUGUST 26, 27, 28, 29, 1930



*These articles were prepared for, and appeared in,
The British Medical Journal
and
The Canadian Medical Association Journal.*

Sheet
F
1042
B&P

THE PLACE OF MEETING

A Collection of Articles

ON

Canada, Manitoba
and Winnipeg

PREPARED FOR THE

98TH ANNUAL MEETING

OF THE

BRITISH MEDICAL ASSOCIATION

AT

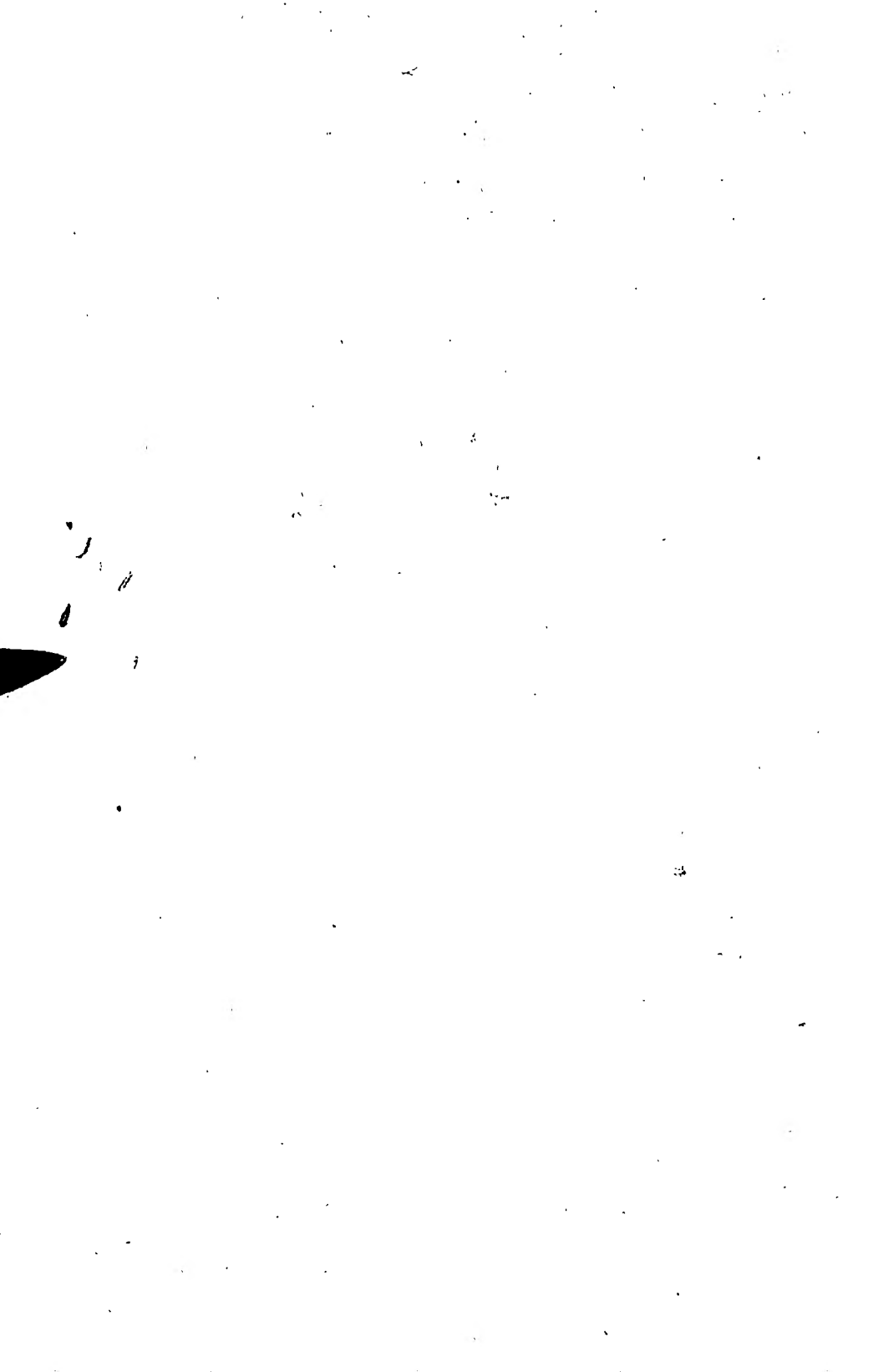
WINNIPEG

AUGUST 26, 27, 28, 29, 1930

H. A. 1707
16-1-31



*These articles were prepared for, and appear in
The British Medical Journal
and
The Canadian Medical Association Journal.*





TO
A. D. BLACKADER, M.D., LL.D.

MONTREAL

EDITOR EMERITUS

THE CANADIAN MEDICAL ASSOCIATION
JOURNAL

*Whose enthusiasm, inspiration and generosity
made this work possible.*

CONTENTS

"An Adventure Across Canada in 1930"
—*D. A. Stewart, M.D., Ninette.*

"Historical Sketch of Manitoba"
—*Ross Mitchell, M.D., Winnipeg.*

"Manitoba's Educational Institutions"
—*Ross Mitchell, M.D., Winnipeg.*

"Winnipeg—Its Early History and Industrial
Development"
—*Percy G. Bell, M.D., Winnipeg.*
—*Steina Sommerville, Winnipeg.*

"Hospitals and Nursing Missions of Greater
Winnipeg"
—*Ross Mitchell, M.D., Winnipeg.*

"Lower Fort Garry"
—*Percy G. Bell, M.D., Winnipeg.*

"Travelling in Canada"
—*Hilda Hesson, Winnipeg.*

AN ADVENTURE ACROSS CANADA IN 1930

With Notes on Earlier Adventures
and Adventures

By D. A. STEWART, M.D. NINETTE

IN the middle of August, 1930, two parties of physicians and surgeons of Great Britain will set out toward Canada upon a voyage of discovery, exploration, and adventure. To all who sail in the *Duchess of Bedford* and the *Duchess of York* are granted hereby and hereby in full the rights and privileges which Henry VII bestowed upon John Cabot and his sons in 1497: "Full and free authority, leave and power to sail to all ports, countries, and seas . . . to seek out and discover whatever isles, countries, regions or provinces . . . which before this time hath been unknownen."

As you scan the westward horizon for the hazy blur of landfall—if you can only adjust your glasses to look back 930 years, to a time when England was still Saxon—you may see an open Viking boat, with Leif, son of Eric the Red, nosing in at Labrador and calling it Helluland, the land of flat stones, or at Newfoundland, calling it Markland, the land of trees, or sailing away to Nova Scotia, or still southward to find Vinland, the land of vines and grapes. Or, if you can focus at 433 years ago, you may have a glimpse of bunt little turreted vessels with John Cabot and company touching at the New-found-land which he reported as "Seven hundred leagues west of Ireland" and "the country of the Grand Khan." So the grudging purse of Henry bestowed, "Item, to him that found the new isle, ten pounds."

Follow Jacques Cartier

All the way up the St. Lawrence you will follow in the very wake of the real discoverer of Canada, Jacques Cartier of St. Malo. In 1534 he entered and named Belle Isle Strait, thought (as you probably will also) that the north coast of the gulf was "the land God gave to Cain," discovered the island which became Canada's smallest province, and sailed on a hot day into a bay he called Chaleur. Next year he ventured on, as you will, up to Quebec and even to Montreal.

Anchored at the mouth of the St. Charles, beside the Indian Stadacona, which became the French Quebec, in the winter of 1535-36, the bold captain, turned perforce to our craft, entered in his log a very vivid description of scurvy, and an account of the first white man's autopsy made in Canada.

"Some lost all strength . . . legs swollen and inflamed, sinews contracted and turned as black as coal . . . legs blotched with purple-coloured blood . . . mouths so tainted that the gums rotted away down to the roots of the teeth, which nearly all fell out. . . . And because the disease was a strange one the Captain had one body opened And it was discovered that his heart was completely white and shriveled up . . . his liver was in good condition but his lungs were very black and gangrened . . . his spleen for some two finger-breadths near the backbone was also slightly affected, as if it had been rubbed on a rough stone."

"There were not three men in good health" when the Indians suggested hemlock tea. "In less than eight days a whole tree . . . was used up, and produced such a result that had all the doctors of Louvain and Montpellier been there with all the drugs of Alexandria they could not have done so much in a year as did this tree in eight days . . . They were cured of all the diseases they had ever had . . . even the French pox."

Historic Quebec

Four centuries of history—French colonial, British colonial, and Canadian—lie side by side in the city and province of Quebec as in a museum. In narrow streets and break-neck lanes, in old houses and ancient customs, in obsolete citadel and city gates, in Wolfe's Cove and the Plains of Abraham, the past lives within the present.

Up the St. Lawrence, from the days of Cartier, Champlain, Frontenac, La Salle, have toiled innumerable canoes with explorers, adventurers, traders, soldiers, priests; and down the St. Lawrence many a returning voyageur, with peltries and, perchance, wounds, and tales of new lakes, rivers, and tribes, and still new lands and vistas to westward.

Almost every homestead, even to-day, with its scant-roofed, big-chimneyed house of stone, and long wooden barn, was born in adventure. When its roofs were raised and its fields cleared the musket had to keep daily company with the axe and the ploughshare. No wonder that the homes hug the river banks like a straggling village, with narrow ribbons of farms stretching back almost as far as eye can reach. Here life goes on, even in this day of radio, almost as placidly as a century ago.

Three Rivers was an early outpost of trade and defence against Indians. It now fights in the same spirit its infant mortality and tuberculosis rate. Here, beside huge paper mills, rafts of pulpwood—the food for the mills—float in the same waters with steamers that take the finished product anywhere in the Seven Seas.

The Romance of Montreal

What city was ever planned and built with the romance of Montreal? What other settlement anywhere was ever founded, the hospital first, and the settlement a kind of afterthought to supply patients for the hospital? That was an age of the seeing of visions and the dreaming of dreams. One pious lady in France had a vision of a hospital in this very nook of the wilderness; another pious lady gave money; devout and chivalrous Maisonneuve lent, his sword willingly to the enterprise; and, to the scandal of all practical persons and the chagrin of viceregal Quebec, the visionaries landed in May, 1642, and celebrated mass at a rustic altar festooned with flowers and lighted with fireflies for tapers.

Here stalwart settlers fought Indians and, even worse, the dominance and monopoly of official Quebec. Times have changed, and now Montreal sits at the receipt of custom.

Built on an ample island, backed by a mountain, fronted by a broad river and a fine view of distant hills, with world-famous university and hospitals, the wealthiest and most populous community in the Dominion, a seaport a thousand miles from the sea, Montreal is no mean city. It is almost two cities in one, bilingual, and a paradise for sign painters, for all signs must be painted twice.

Above Montreal, to the Great Lakes, are rapids; the first, which blocked the way to the Orient, called in grim humour, "Lachine." These rapids are canalized only for small craft, but the building of larger canals to bring ocean vessels to Lake Superior and the very heart of the continent is Canada's next big job, though Montreal has doubt about it yet.

Ottawa

If this were not 1930, but a century earlier, we would travel westward by that wonderful craft the "six-fathom" birch bark canoe, carrying four tons of freight and a crew of ten. At the very last chapel on the edge of the wilderness a century ago, but still to be seen from the train window,

"Soon as the woods on the shore looked dim
We'd sing at St. Anne's our parting hymn,"

and push up the turbulent Ottawa. At the Chaudière Fall, where there was a big carrying place or "portage," a hamlet of voyageurs and trappers grew up, then a straggling village of lumbermen, Bytown; then, Cinderella-like, a fairy wand touched the place, and, lo! it became Ottawa, the stately capital of Canada.

Besides Parliament Hill and many things else to see, be sure to remember the National Museum, where some fine specimens of prehistoric residents of Canada, especially of the Upper Cretaceous formation of Alberta, are to be found, among them: *Eucreatorops canadensis*, *Styracosaurus albertensis*, *Brachyceratops dawsoni*, *Hadrosaur edmontosaurus*, the Cretaceous theropodous dinosaur, *Gorgosaurus*, etc.

Nine Provinces, but Six Canadas

Ottawa is in Ontario, but as near Quebec as a loop of the river will allow it to be. Before confederation and the forming of the Dominion in 1867 there were two Canadas—Lower Canada or Quebec, and Upper Canada or Ontario. Besides these there were three maritime colonies and the whole west and north, which was little better than a no-man's-land. Now there are nine provinces, and northern territories besides.

In reality there are something like six fairly distinct Canadas. First, the Eastern Maritimes; Nova Scotia, New Brunswick, and Prince Edward Island, chiefly Scotch-English, thoughtful, thorough-going people, with farming, fishing, fruit growing, lumbering, and coal mining as the chief industries—and one of the chief exports, university professors. Next comes Quebec, extending from the Atlantic along the north side of the Ottawa almost as far west as Toronto, its people very largely French, industrious, thrifty, domestic, with farming, lumbering and paper making as chief industries. Third, Ontario, which extends from near Montreal to near Winnipeg, and from the Great Lakes to James Bay, largely English-Scotch-Irish, central, populous, and dominant among the provinces, with almost all the various industries of soil, water, and rock. Fourth, the three prairie provinces of Manitoba, Saskatchewan, and Alberta, young, optimistic, and progressive, Anglo-Saxon chiefly, but with an increasing mixture of the races of central Europe, largely wheat-growing, but more and more looking northward to resources of furs and mines. Fifth, the Pacific Coast province, British Columbia, with its sea of mountains, its mines, rivers, timber, its fair fruit-filled valleys, and seaports in touch with the Orient. Sixth, the north country from east to west, and bounded to the north by the Arctic, long sealed, but now opening to the magic keys of aeroplane and wireless.

Toronto

A century ago the new and struggling colony of Upper Canada had many small centres; but little "Muddy York," on the shore of Lake Ontario, outstripped the others, and now, as the fair City of Toronto, dominates the great province of Ontario, the centre for legislation and the chief centre for education, finance, and commerce. With the development of extensive mines in the Ontario hinterland, Toronto has become in the past few years mineral-minded also. Above all else industrious, substantial, church-going, and very sure of herself as the quintessence of Canada—you will find Toronto a fine city of worthy citizens.

Lakes and Great Lakes

Canada is pre-eminently the land of lakes—lakes small and large, known and unknown, unnumbered and innumerable, but tens of thousands of them, quite likely hundreds of thousands. Aeroplane maps show often hundreds where old maps have none. Not a few among them are really great lakes, but the name "Great Lakes"

is always reserved for the familiar half-dozen that maps show like a cluster of fruit hanging on the stem of the St. Lawrence. They are really freshwater inland seas, shared between us and the people of the United States, that give a waterway to the very heart of the continent.

What changes these shores and channels have seen! What differing errands and what varying craft! First the frail bark canoe of silver birch slinking in the shadows of the dark lee shore, filled with eager savages, vermilion-painted, silent, at war.

Then discoverers, explorers, adventurers, priests, first of France, then of Britain also, toiling up the channels all the long June days, with bivouac and guard at night, with trinkets to trade for peltries, writing down in scant journals and Jesuit "relations," and sketching in crude charts this new world unrolling as a scroll before their advance.

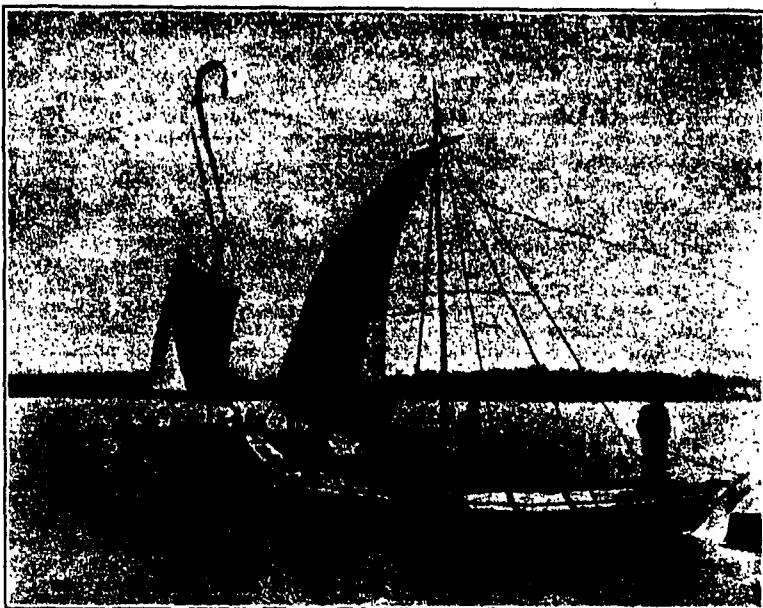
Then the traders. We have seen that the canoe route from east to west avoided the lower Great Lakes—the haunts of the Iroquois, implacable enemies of the French—and reached the upper lakes by the strenuous Ottawa and other such turbulent streams. Here, even in the late seventeenth century, French trade dribbled in, and was established in the early eighteenth. In the later eighteenth it reached its zenith, but now no longer distinctively French. Indeed, the "North-Westers," who formed in 1783 the loose-jointed North-West Company, with eastern headquarters at Montreal and western at the head of the lakes, was largely made up of McDonalds, McGillivrays, McKenzies, McTavishes, and others of their race for whom the Highlands of Scotland were still uncomfortable since Cullodén. These were the "bourgeois," "proprietors," "partners," "traders," "clerks." All the voyageurs and some of the bourgeois were still French Canadian.

The Great Fur Parliament

The annual meeting was first at Grand Portage, and when that was found to be American territory, after 1802, at Fort William. Here for six weeks met hundreds of men of varied types. Up from the east came the swarthy Montreal brigades with sweating, singing crews. Their "lake" or "six-fathom" canoes were remarkable craft. Two men could carry them over a portage, yet they carried four tons of merchandise and a crew of ten or twelve. Faster travelling, lighter "express" craft, breasting waves on cape-to-cape "traverses," carried the aristocrats of the trade, the eastern partners. Down from the lonely posts of the far west, even from the Arctic Circle, came the "wintering partners" and traders. Here, in halls hung with portraits and trophies, west met with east in state, with skirl of official pipes, to tell the conditions of trade, unfold new maps, establish new posts, explore new territories, suppress new revolts, circumvent new "oppositions," and especially challenge the "English" company of adventurers which "traded into Hudson's Bay," as this, the Canadian company, followed the Great Lakes route.

At this great fur trade rendezvous—half-way up for the trading goods, half-way down for the peltries—all was bustle. Bales of blanket cloth and duffel, packages of flintlocks and knives, kegs of gunpowder and rum, must be unloaded from the "six-fathom" "lake" canoes, allocated, retailed, distributed, made into ninety-pound packages for the "four-fathom" "northern" canoes (canots du nord). Packages of peltries from every river in the north, already six months in a year on their way, were sorted and repacked for the returning brigades. Here for six weeks men of all ranks in the trade, "proud North-West bucks," mingled, told their tales of adventure, smoked their pipes, renewed acquaintances, drank fierce toasts with their "regales" of rum, and fought out their feuds. Then the "Northmen" or "Winterers" turned to their far posts and their

dusky families, the "pork eaters" or "comers and goers" to their eastern homes and farms and families, the lords of the trade to Montreal and their club-house on Beaver Hill.



YORK BOATS ON LAKE WINNIPEG
(Courtesy The Hudson's Bay Company)

The Romance of To-day

The day of the birch bark trade canoe is gone. Indeed it became much changed after the rival companies amalgamated in 1821, when the much shorter route by "the Bay" was used and the heavier "York boat" developed. But the Great Lakes have still their distinctive life and traffic and colour. If the pulse of lake traffic be counted at some such point as the Detroit River, it will be found that the gross tonnage enables our American friends, who share it, to make the kind of superlative statement they are fond of—greater than in any other strait or channel in the world. What will it be when the St. Lawrence channel is opened for sea-going vessels and a Glasgow tramp brings cottons or tweeds or boiler grades right up to Thunder Bay, or a Liverpool freighter sloughs its barnacles while taking on a load of wheat in the Kaministiquia?

The lake traffic is largely bulk traffic, whole loads of wheat or ore, coal or pulpwood; and the predominance of such loads has developed peculiar types of carriers, found nowhere else on lake or sea. Smudges on the sky line gradually take form as low-bellied freighters, dachshunds of navigation, two boats and a half long and half a boat high; long, low-lying craft, mere lines on the water, with quarters fore and quarters aft, and half a mile of deck between, bluff-bowed, with thirty hatches or even more, steady-going, deep-voiced, grunting scant greetings as they pass. A few "whalebacks" still may be seen. It is near December when the fleets roll in, ice-clad, take on a cargo of wheat, tie up, and so give storage all winter. In early spring they smash through behind the ice breaker, and a new season has begun.

From the birch canoe of the redman, the "six fathom" of the trader, the Griffin, the first sailing vessel of Tonty, built at Kingston and lost—literally lost—in Upper Huron, and which, like the Flying Dutchman, is said still to haunt the lakes, to the floating palaces in which many of you will embark, the whole history and traditions of the craft and sailors of the Great Lakes might take their places very creditably beside those of any of the Seven Seas.

The Middle West

Of the six different Canadas already indicated it is the Canada of the prairies that has the high honour of being host to the British Medical Association. The adventurers of 1930 enter this region from the "Head of the Lakes," as most of the earlier explorers did, and here and there parallel, or cross, the old canoe routes. At the Lake of the Woods and Minaki you pause beside them. If this meeting of the British Medical Association had been convened either in 1832 or in 1932 you might have chosen to come in along the trails of other adventurers, by the nearer Hudson Bay route. Parts of Manitoba and Saskatchewan, strange to say, are actually nearer to Liverpool than New York is. These advantages of the narrower North Atlantic, the great bay gouging in almost to mid-continent, and the shorter canoe voyages, "The Company of Gentlemen Adventurers Trading into Hudson's Bay" had over the rival "North-Westers" of Montreal and Fort William.

Manitoba extended to the Hudson Bay and became a maritime province so very recently that even her own people as yet scarcely know that while Shakespeare was still on London boards, in 1612, two years after Henry Hudson entered the great bay, Thomas Button, with a letter in his pocket from the Royal James to the Emperor of Japan, first raised the flag of England on Manitoba soil. Where Manitoba's new seaport, Churchill, is now growing up, Jens Munk from Denmark lost his whole two crews but two men, from scurvy, in the winter of 1619-20, the captain and the two men curing themselves with the first grass of springtime and sailing the smaller craft home.

Prince Rupert got his charter and monopoly in 1670, but for nearly a century the French fleet kept the Company from quiet possession. About 1730 La Vérendrye began his "search for the Western Sea," by the lake route, built his principal Manitoba fort in 1738, explored north-west and south-west almost to the mountains, and opened up a trade which the French maintained until about 1760. Their successors, the Scotch-English-French "North-Westers" from Montreal, using the lake route, were for fifty years the keenest rivals of the "English" Company of the Hudson Bay. Their "opposition" kept some sort of bounds, until the Selkirk settlers, with a sheepskin title to the whole territory by virtue of ten shillings lawful money paid in London, formed a third party. With the eternal triangle, as usual, came mischief. There were laws made and laws broken, intrigue, blood-shed, litigation, and finally, in 1821, amalgamation.

When peace had been thus restored, and when their earlier difficulties had been overcome, the Red River settlers, isolated in the midst of a continent, almost as though on a coral island in mid-Pacific, developed a unique and, in many ways, idyllic life, which the "old timers" who survived the coming of railways and settlers, immigrants, and "civilization," look back upon with some regrets. In the convention city will be found still some links with the past, among them the gateway of Fort Garry, in which as a youth R. M. Ballantyne pushed a reluctant quill over ledger pages and dreamed romances. At that time two community buffalo hunts each year yielded two harvests of pemmican, dried, shredded, or "beat" buffalo meat, preserved in fat in sacks of buffalo skin, with not quite all the hair left on the outside, it is said.

The Epic of Wheat

In the early eighteen-seventies came an irruption of farmers into the plains; in the eighties Manitoba was pretty well filled up, in the nineties Saskatchewan and Alberta; and since that time settlement has pushed into the remaining corners, and northward. Rifle and hunting knife gave place to plough and reaper, and the prairies blossomed into wheat.

The great Epic of Wheat has been only partly written: the high hopes of the early settlers; the killing frosts that changed promising crops into black ruins; the conquest of frost by the developing of earlier ripening varieties, and by the changes in temperature when large areas of land were broken; the triumph of "Marquis" wheat; the tragedies of hail and drought and flood; the tragedies of rust; the conquest of rust now almost within sight; the difficulties of transportation becoming better and better solved; the problems of markets and marketing very far from solution still; the dangers of one-crop farming, the spread of weeds, the development of mixed farming; the first tentative trial of wheat along merely the very edge of the forty-ninth parallel, and its spread almost to the Arctic Circle. Great will be the Epic of Wheat when some one is found to write it.

The New North

A change is coming over the prairies. Manitoba and Saskatchewan have mines and mining in the north, and even lumbering and paper making. Saskatchewan in the south has beds of lignite coal. Alberta has coal of all varieties; natural gas, and oil. In the north can be seen the "last agricultural West" in the Peace River Valley, tar sands and oil along the Mackenzie, and growing herds of more or less domesticated buffalo and reindeer in the sub-Arctics.

The Glory of the Fields

For visitors and adventurers from the homeland the supreme sight in the prairie provinces is the harvest—the farmer would add "when good." Even from train windows there are miles upon miles of golden grain. Years ago one of the best sights was the groups of stacks, but stacks are now scarcely ever seen. Then the fields of stooks were most attractive, but now they too are passing as harvesting methods change. The early Red River settlers reaped their fields and threshed their grain pretty much with the implements of Boaz and Ruth. Now the growing fashion is to cut and thresh with one rather cumbersome "combined" machine. But even machinery has not taken all poetry from the waves of shadow and of tossing heads that follow one another across the fields when the prairie breeze bloweth as it listeth.

A Sea of Mountains

The backbone and "Great Divide" of the Continent, the grey granite, snow-capped Rocky Mountains, are taken as the boundary between Alberta and British Columbia—that is, between the Canada of the prairies and the Canada of the Pacific slope. On the prairie side they rise abruptly. One of the experiences of approaching them from the eastward is of snow-caps peeping one by one above the prairie horizon until suddenly the whole sheer wall stands glistening in the morning sun. On the western side, between the Rockies and the coast, several parallel ranges, the Selkirks, Gold Range, Coast Range, and others, stand like the thick-set ridges of a ploughed field, with deep-furrowed valleys between. These outer ranges are on the whole less grim and more green, more pleasing and less awe-inspiring than the gray cloud-robed Rockies.

Altogether, British Columbia has perhaps a hundred thousand square miles of mountain and valley, dotted with snow-caps, many

still virgin peaks. It has miles upon miles, hundreds of miles, of glaciers, great rivers, and countless smaller streams, with rapids and waterfalls innumerable, immense water-power potentialities, a score of lakes that rival Switzerland's, tens of thousands of green glades and many fertile valleys. In short, here are several various Switzerland-lands in one, only half explored, and with adventures enough to last the most eager for a hundred years. Fjords almost beyond counting, and as fine as Norway's, run like fingers of green water between blue buff headlands of mountain and wood. Rivers and shore waters teem with fish. In the wombs of the mountains are copper, silver, gold, lead, and abundant coal. Valleys of deep volcanic ash are covered with orchards that, like Eden, bear every manner of fruit after his kind, irrigated by streams from surrounding glacial fields.

"The Coast"

Especially since the opening of the Panama Canal, through trade, even of prairie wheat, has developed. Vancouver and Victoria are Canada's outposts towards the Orient, thinking Pacifically, as Halifax and St. John, Quebec and Montreal think Atlanticly. With a mild and pleasant coast climate, in which English holly grows and English accents and customs flourish—with all her wealth and all her beauty—surely the west coast of Canada must have had a very generous fairy godmother.

It was in 1793, four years after he had followed the great river that bears his name, to the Arctic, that Alexander Mackenzie pushed through with infinite toil from the prairies to the salt waters of the Pacific. Later, in a London drawing room, comparing notes with Captain Vancouver, he found that, one from the land, the other from the sea, they had been within a mere day of meeting in that same west coast inlet.

Some of the adventurers of 1930 will look out from observation cars on the seething waters that bear the names of the great geographer David Thompson, and of bold Simon Fraser—the Thompson and Fraser rivers. You may have pointed out to you some traces still of a mere ledge half-way up the precipice which in the fifties and sixties was the gold seekers' road to the adventurous Cariboo. Even camels were tried on this dizzy trail. It was to the Cariboo that Viscount Milton and Doctor Cheadle made their early "North-West passage by land" by way of Fort Garry, now Winnipeg.

With all her lure of beauty and of latent wealth as well, is it surprising that Scotchmen should have attempted an early Gretna Green marriage with this gifted heiress, and given her a name she acknowledged gracefully for half a century, New Caledonia? What with a New Caledonia on the west coast, and a Nova Scotia on the east, might not some suspicion arise of a deep, dark plot to make the whole of Canada a new domain for the Scot? Is there not even some suspicion that the plot succeeded?

Down by the Sea

After the whole tour from east to west and back again, if there is one bit of Canada that could still present fresh charm, and not an anti-climax, even after the Province of the Western Coast, it is the Canada of the Atlantic, the provinces of Nova Scotia, New Brunswick, and Prince Edward Island.

Here some of the earliest settlements were made by French and British, by Celtic Breton and Celtic Scot. Indeed, here may have been the very earliest settlement of all, Vinland the Good of Lief Ericson and his followers. Here, around the battlements of Louisbourg, the two races, that later welded to make Canada, clashed again and again in the struggle for mastery. Here is the land of fair Evangeline, and here on many a quiet homestead may still be

seen the ox-cart of the habitant, little changed in all the intervening years.

Nova Scotia, it may not be generally known, has a colony in the heart of Auld Scotia—the parade, indeed, at Edinburgh Castle. This became Nova Scotia soil many years ago, so that a noble lord might claim a new-land title, without the toils and perils of leaving the old land. The three provinces have in reality many colonies. Wherever in west or south some very big work is being done, Nova Scotians, New Brunswickers, or Prince Edward Islanders are, as likely as not, at the bottom of it. And half the universities of this continent have colonies of “the Maritimes” of Canada in their professorial staffs. The unusual brain and brawn may not unlikely have something to do with an early diet of herring and the shorter catechism. The Maritime people take naturally to education and politics, but sixty years of partnership in the confederation has scarcely accustomed them to be called Canadians. It was down by the sea in Windsor, Nova Scotia, that the peculiar humour of this new continent was born in the works of Judge Haliburton, whose Sam Slick is even supposed to have suggested Sam Weller.

One of the sights of all Canada is the Annapolis Valley at apple-blossom time; another, the fishing schooner Bluenose at a racing angle; still another the north-west arm of Halifax harbour; another, the Bras d'Or Lakes, which may have been the very region of Vinland itself. Another is the sixty-foot tide that rushes up the Bay of Fundy, roars around the base of Blomidon, makes a reversible fall at the mouth of the St. John River, and carries a tidal bore up as far as Moncton.

About the Maritimes much more could be said that would still leave more than all unsaid. Suffice it to say that here the adventurers of 1930 are to have their farewell visit, their last impressions, perhaps their best impressions, their stirrup cup, “Bon Voyage!” and “Will ye no’ come back again?”

“If health be the very source of all pleasure, it may be worth the pains to discover the regions where it grows, and the springs that feed it.” —Sir Thomas Browne.

HISTORICAL SKETCH OF MANITOBA

By ROSS MITCHELL, M.D., WINNIPEG

IN 1867 four provinces, Ontario, Quebec, Nova Scotia and New Brunswick, which up to that time had been politically separate, entered into confederation and the Dominion of Canada was born. One of the first problems to be dealt with by the first Federal Government was the creation of a new province out of that vast district west of Ontario which was under the control of the Hudson's Bay Company. Some preliminary work had already been done. In 1859 the licence of the Hudson's Bay Company was due to expire, and the Parliament of Canada of that time, which meant Ontario and Quebec, petitioned the British House of Commons not to renew the licence. A committee of the British Parliament was appointed to investigate the matter and after hearing evidence reported that the districts along the Red and Assiniboine Rivers were likely to be needed soon for settlement, and that "arrangements should be made by which these districts may be ceded to Canada upon equitable principles, and within the districts thus annexed to her the authority of the Hudson's Bay Company would, of course, entirely cease." Meanwhile, the Canadian Government sent out an exploring expedition under S. J. Dawson and Professor Hind. Dawson's duty was to survey a road from Lake Superior to Fort Garry at the junction of the Red and Assiniboine Rivers, while Professor Hind was to report on the vegetation and soil of the country. Parts of the Dawson road are still being used and Hind's report was illuminating. It is of interest to note that R. M. Ballantyne, the novelist, was one of Hind's party.

As a result of the investigations, the new Federal Government decided to purchase the rights of the Hudson's Bay Company. For a payment of £300,000 the Company surrendered its rights in Rupert's Land, reserving only one-twentieth of the fertile land and a reserve of 500 acres around each post. Thus, in Winnipeg, a large area on which are located the old gateway of Fort Garry, the Fort Garry Hotel, the new Hudson's Bay store and the Legislative Building is still known as the Hudson's Bay Reserve.

The new province, Manitoba, entered Confederation on July 15th, 1870. Its birth, however, was not uncomplicated. A large number of the inhabitants of the Red River Settlement were French halfbreeds or "Métis," and the prospect of an influx of settlers from Ontario, English speaking and of another religion, who would till the soil and drive away the herds of buffalo on which the Métis had depended for subsistence, did not please them. The arrival of Canadian surveyors to institute a new square block survey of land in place of the long narrow river lots served to fan the discontent. Under the leadership of Louis Riel, a young man who had received education for the priesthood but had never taken orders, the discontent broke out into flame. A Provisional Government was formed; Fort Garry was seized. The Hon. Wm. MacDougall, who had come from Ottawa to be the new Governor, was not suffered to enter; many prominent citizens were imprisoned, and, finally, a young Irish-Canadian, Thomas Scott, was shot after a mockery of a trial. The fate of Scott created intense indignation in Ontario. It was agreed with the British Government that an armed force supported by both governments should be sent out. This force was composed of British Regulars and volunteers from Eastern Canada under Colonel Wolesey, who in later life became Field Marshal and was raised to the peerage. After struggling through the wild rocky region between Lake Superior and the Lake of the Woods, it reached Fort Garry in August, 1870. Just before the arrival of the advance guard, Riel and his two lieutenants, who by that time had been deserted by most of their followers, quietly slipped out of the fort

and the Provisional Government ceased to be. It is of interest that among Riel's prisoners in Fort Garry were Dr. J. C. Schultz, after Hon. Sir John Schultz, fifth Lieutenant-Governor of Manitoba, and Dr. Wm. Cowan.

The name Manitoba, is derived from two Indian words, Manitobau, the "Spirit Strait." In the narrows of Lake Winnipeg there is an island on which the limestone is very compact and resonant. When the waves beat against the beach the roaring sound was thought by the Ojibways and Crees to be due to the Great Spirit beating a drum. The early spelling was Manitobah, the accent being placed on the last syllable, but the final "h" was soon discarded and the accent is now on the third syllable.

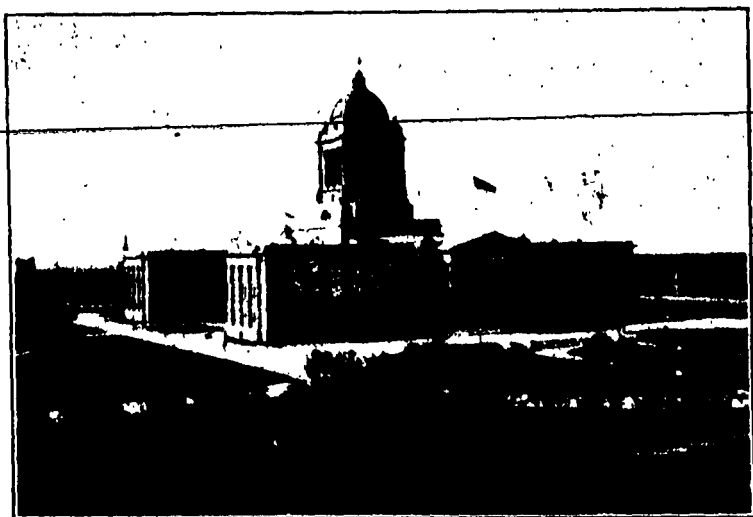
As first constituted, Manitoba was square in outline, and so small that it was called, "The postage stamp province." In 1881, the boundaries were extended, and in 1912 a further extension of the boundary northward gave Manitoba the two best harbours on Hudson Bay, Nelson and Churchill, and 500 miles of coast-line. By this change the tiny province of 1870, containing 13,000 square miles, reached its present size of 251,000 square miles, just double that of the British Isles.

The Hudson's Bay Railway, long thought to be only a visionary enterprise, has, by the action of the Dominion Government, become a fact, and steel has been laid from The Pas, Manitoba, on the Saskatchewan to Churchill on Hudson Bay. Close to its terminus lie the ruins of Fort Prince of Wales. The first fort was built of wood by the Hudson's Bay Company in 1717; the second, five miles down the river, built of stone and of tremendous strength, was begun in 1731, after plans drawn by Marlborough's engineers, and completed in 1746. In 1782, the French, under Admiral de la Perouse, surprised the fort, captured it without firing a shot, and blew it up. In 1930, passenger trains will be running from Winnipeg to Churchill on a well-ballasted track.

Mention of the railway summons up visions of how transportation has been effected in the past. The first means of transport used by the fur traders were birch-bark canoes, which had the merits of lightness, buoyancy, ease of repair, cheapness, and facility of construction, as all the materials necessary could be found in the forests. They were, however, very vulnerable and could not be used to convey very heavy or bulky objects. About 1826, one of the Hudson's Bay Company's factors introduced the York boat, modelled after the old Norse galleys. The York boat was of a type light enough to be taken on rollers over portages, strong enough to shoot the rapids, sufficiently seaworthy to cross such stormy lakes as Lake Winnipeg, and roomy enough to carry a cargo of eight pieces, each of one hundred pounds, besides a crew of eight voyageurs, including bowman and steersman. They were propelled with oars about twenty feet long and with one large square sail.

As the Red River settlement increased in numbers the settlers' needs could not be met by the Hudson's Bay ship which came annually to York Factory on Hudson Bay. Traffic sprang up between the Red River settlement and St. Paul in Minnesota, which was on a line of railway. Goods were transported in brigades of Red River carts, drawn by oxen or native ponies. These two-wheeled carts were made entirely of wood and could be made with only a saw, chisel and draw-knife. Each cart could carry about one thousand pounds. These in turn, were superseded by flat-bottomed stern-wheel steam-boats, which for some twenty-five years travelled up and down the Red and Assiniboine Rivers between points in Manitoba and Minnesota. In 1878, railway communication was established between Pembina in Minnesota and St. Boniface across the Red River from Winnipeg, and in July, 1881, the first train of the Canadian Pacific Railway entered Winnipeg. Within the last few

months arrangements have been completed for regular air mail service throughout the west.



THE LEGISLATIVE BUILDING,
WINNIPEG

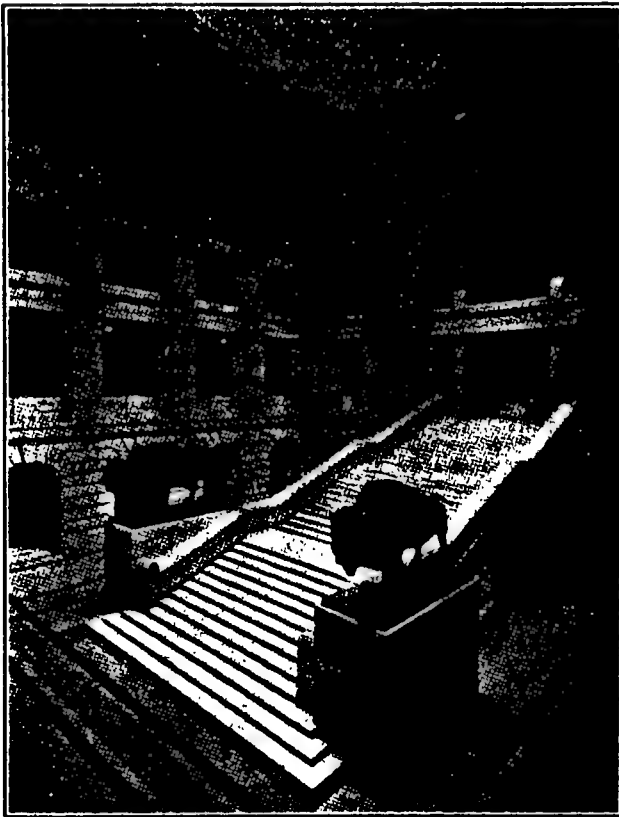
Manitoba's first cabinet was formed on June 12, 1871, when the total provincial population was 11,693, of which the white race numbered 1,565. When Winnipeg was incorporated in 1873 the new city could muster only 215 inhabitants. The present population of Greater Winnipeg is 336,202, and the population of Manitoba in 1926, according to the Dominion census, was 638,000, of which only a few thousands were Indians. When Manitoba entered Confederation the Dominion Government retained control of the natural resources. Repeated attempts were made by provincial governments to have these resources transferred to the province, but it is only within the last months that these efforts have been successful. How valuable these natural resources—water powers, forests, and, above all, minerals, are, no one can say, but the present indications are that as further development takes place they will prove to be tremendous assets. The Minister of Natural Resources has recently stated that the water power available in the Nelson, Churchill, and Winnipeg Rivers in the province totals 5,000,000 horse power.

Much of the history of the Red River Settlement and Manitoba has been incorporated in the new Legislative Building. The design of the architect of the building, Frank Worthington Simon, F.R.I. B.A., of Liverpool, was that what was best in the Past should be preserved and wrought by the hand of the Present into the structure emblematic of Manitoba—"The Land of the Great Spirit." The southern entrance looks toward the Assiniboine River, along which passed the early explorers, fur traders, and colonists. At the eastern entrance are the stone figures, heroic in size, of La Vérendrye, the first white man to open up the Canadian West, and Lord Selkirk, the first to establish a colony. At the western entrance one sees the figure of Wolfe, who, visioning Canada as one of the units of the British Empire, gave his life for that vision, and of Lord Dufferin, the first Governor-General of Canada to visit our West and catch

a glimpse of its possibilities. In 1877, he spoke these words in Winnipeg, "Manitoba is destined to be the keystone of a mighty arch of sister provinces stretching from the Atlantic to the Pacific." Most impressive is the main entrance which, prophetically, looks to the north. Six fluted columns of stone with Ionic capitals support an entablature in which Alfred Hodge has portrayed an allegory of the Dominion worthy of much study.

The stone of which the building is constructed carries the mind back to far-off geological periods. It is a limestone quarried at Tyndall near Winnipeg, of great strength and beauty, bearing marks of fossil ferns and aquatic animals.

Entering on the north one sees the main stairway flanked by two bronze buffaloes, emblems of the province, sculptured by Gardet, of Paris. The stairway leads to a rotunda under the dome and the eye is arrested by the great Brangwyn mural painting of scenes in the Great War.



STAIRWAY, LEGISLATIVE BUILDING

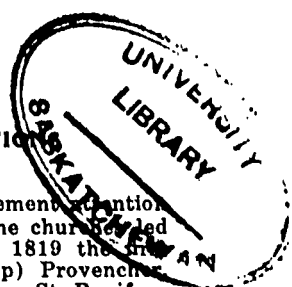
The legislative chamber is one of quiet dignity and beauty. The mural decorations by Augustus Tack are woven about the theme, "The Origin of Legislation." On the other side of the Speaker's chair are massive bronze statues of Moses and Solon.

From the centre of the building rises a square tower surmounted by a dome on which is poised the gilded bronze figure of a boy typifying Eternal Youth, the Spirit of Enterprise. The figure was cast in a foundry seventy miles from Paris. During the war the foundry was completely destroyed by bombing, the figure alone remaining unscathed. It was rushed to a seaport and put in the hold of a vessel bound for America. Before it drew out of port the boat was commandeered to transport American troops, and for two years the bronze figure was carried in the ship through submarine-infested waters. At the close of the war it was brought to New York and thence to Winnipeg. The attitude of the boy who seems to have poised in flight for a moment is that of a runner, his face to the north, signifying that the spirit of enterprise, capable of enduring hardships, sees the vast possibilities of the northland with its wealth of natural resources. Under his left arm he carries a sheaf of golden grain and in his right hand, uplifted, he holds a torch, *vita lampada*, recalling McCrae's lines—

"To you from failing hands we throw
The torch—be yours to hold it high!"

MANITOBA'S EDUCATIONAL INSTITUTIONS

By ROSS MITCHELL, M.D., WINNIPEG



EVEN from the early years of the Red River Settlement attention was given to education. In those early years the church led the way; later, the state became predominant. In 1819 the first Manitoba school was opened by Father (later Bishop) Provencher, and four years later this school had expanded to become St. Boniface College. In 1820, an Anglican school was established by Rev. John West. This school afterward grew into St. John's College. The Presbyterians entered the educational field in 1851, when Rev. John Black, a minister of the Church of Scotland, took charge of the Selkirk settlers' school at Kildonan, which in time became Manitoba College. Wesley Hall, afterward Wesley College was dedicated in 1868. In 1870 the government of the settlement passed from the hands of the Hudson's Bay Company and the new province of Manitoba was formed. The Provincial Legislature in 1871 formed a Board of Education in two sections, Protestant and Catholic. In 1890, after much agitation, free non-sectarian public schools were established. In some districts bilingual teaching is carried on in the primary schools. Both primary and secondary schools and also the University are under the control of the government. The people of the province have always supported the schools loyally.

The University of Manitoba

Properly to understand the position of Manitoba's university, one must realize three facts, first, that it originated in 1877, only seven years after the purchase by Canada from the Hudson's Bay Company of that vast district then known as Rupert's Land; secondly, that at the time of its founding the population of Manitoba, including Indians, was less than sixty-five thousand; and lastly, that it arose from the federation of three denominational colleges—St. Boniface, supported by the Roman Catholic Church, St. John's, by the Anglican Church, and Manitoba College, by the Presbyterian Church. Each of these colleges at that time, and for several years, had a hard struggle for existence. Manitoba has never been a wealthy province, and the University has been dependent on the support of the government and students' fees. With three or four notable exceptions, to which reference will be made, there have been no endowments. In determining the constitution of the new university, the University of London was taken as the model, and until 1900 the University of Manitoba was merely an examining and degree-conferring body, all the teaching being done by the constituent colleges. Yet at the present time, 1929, the University of Manitoba is second in Canada in point of numbers of students enrolled,—about two thousand five hundred—and there are 4,733 graduates in arts, theology, medicine, law, engineering, and agriculture.

When one reflects upon the large part that religious and denominational differences played in those early days, as, for example, the Manitoba school question which caused a tremendous upheaval throughout Canada and led to the defeat of a hitherto strongly entrenched federal party, it says much for the breadth of vision and magnanimity of the founders of the university that the progress of the institution has been comparatively so untroubled.

The first degree, that of Bachelor of Arts, was conferred in 1880; the first Master of Arts degree was conferred in 1884. After six years of discussion women students were first admitted to the University College in 1886. In 1883 the Manitoba Medical College was organized, and became affiliated with the University. In the following year a reading course in Law was arranged by the University and the Law Society jointly, and the first LL.B. was obtained

in 1886. Wesley College, supported by the Methodist Church, was affiliated in 1886.

The question of finances soon obtruded itself on the attention of the University Council. The Act of 1877 provided that a sum not exceeding two hundred and fifty dollars should be placed at the disposal of the Council of the University to meet the expenses incidental to the organization of the same. It did not seem to be realized that the University as constituted would need support from the public treasury beyond organization expenses. Nevertheless, small grants were made annually. In 1887 the financial clause in the University act was amended to read: "A sum not less than two hundred and fifty dollars shall be placed annually at the disposal of the University for the working of the same." This minimum had been granted from 1877 to 1884. It was then gradually increased until in 1890 it reached \$3,500 for the first time. It remained at that level until 1900. Between 1884 and 1889 the University revenue was increased by the assignment to it of the marriage license fees, which were earmarked for it by the Government.

In 1883, Dr. A. K. Isbister, a native of the Red River settlement, bequeathed to the University \$83,000 for a scholarship fund. To this day Isbister Scholarships from this trust fund are being awarded. In 1878 application was made to the Dominion Government for a land grant as an endowment. For seven years this request of the University Council was urged upon the Dominion Government, and finally, in 1885, one hundred and fifty thousand acres of fair average quality were granted. The allocating of the land took another six years, and it was not until 1898 that the patents were issued, and it was 1900 before any revenue was derived.

In 1899, after prolonged discussion, the university council decided that the University should become a teaching body. Chairs were to be established in Natural Science, Mathematics, and Modern Languages. The Manitoba Government of that day pointed out that the establishment of a university staff carried with it the necessity of choosing a site for the University and the erecting of a permanent building. When approached, however, the Government was unwilling to take any definite action. As a temporary expedient, a property of 6.6 acres, fronting on Broadway, recently conveyed by the Dominion Government to the Province of Manitoba, was placed at the disposal of the University, and on this in 1904 a Science building was erected. The corner stone was laid by the Duke of York, now King George V. The building was made possible by the donation of \$20,000 from Lord Strathcona. The Faculty of Science was organized at that time with six professorships.

The next few years saw the evolution of the University from a federation of denominational colleges to a Provincial institution. In 1907 the University Council asked the Government to appoint a Commission to investigate and report. In 1910 the Commission reported that its members had been unable to agree as to the extent of control of the University by the Province. In spite of delays and disappointments, however, the University was growing, and a distinct step forward was made when a President was appointed, Dr. James Alexander MacLean, who still holds office. The question of a site from 1905 on was, and still continues to be a vexed question. Three sites offered themselves; the small Broadway site, within the city; the Tuxedo site about five miles from the centre of the city, and opposite the city's largest park; and the Agricultural College site about seven miles from the centre of the city, but adjacent to the fine buildings of the Agricultural College, which had been erected by the Provincial Government at a very considerable expense. The Tuxedo Holding Company, in 1905, offered to donate 150 acres to the University on condition that the University

should spend a certain amount on improvements and buildings. In 1916, the offer was repeated to hold good for a term of ten years. The University Council voted to accept the offer, but the Government was opposed. In 1913, the Government, which at first had held out for the Broadway site, offered a tract of 139 acres between the Agricultural College and the Red River and agreed to erect and equip an Engineering Building. August, 1914, however, saw the beginning of the Great War, and a further postponement was necessary.

It became increasingly plain that the University could continue to function most completely only as a Provincial institution, and in 1917 control of the University was vested in a Board of Governors, appointed annually by the Government and responsible to the Government. During these years the University had been making progress. A course leading to a degree in Pharmacy was established in 1905. In 1907 the Manitoba Agricultural College was affiliated with the University. In the same year a Department of Civil Engineering was formed, and in 1909 a Department of Electrical Engineering. Professorships of Political Economy, History, and English were also created in that year. In 1913 chairs were established in French, German, and Architecture, and in 1914 Departments of Classics, Pathology, and Pharmacy were organized. In 1917 the Faculty of the Medical College agreed to transfer their buildings and equipment to the University, on condition that the University carry on a Faculty of Medicine in an efficient manner. A department of Philosophy and Psychology was added in 1920.

The question of accommodation was temporarily met by the erection of a building to the north of the Science Building, by the utilization of the old School for the Deaf, and the old Law Courts, and by the erection, during 1920 to 1922, of temporary buildings on the Broadway site. A grant from the Rockefeller Foundation enabled a new Medical Building to be erected west of the General Hospital.

During the last session of the Provincial legislature the Government appointed a University Committee from members of the legislature to consider the question of a site and new buildings. This committee has now reported unanimously in favour of the Agricultural College site and has recommended that a building, to cost one million dollars, be erected thereon to provide for the needs of the senior years of the University, while the junior years will be housed temporarily on the Broadway site within the city. The report of the Committee will be presented to the Legislature at its forthcoming session. Nothing can definitely arrest the progress of a university which in a little more than fifty years, and in the face of tremendous obstacles, has come to occupy such a prominent place in the educational history of the Dominion, but a wise and liberal policy on the part of the Provincial Government will accelerate its advance and enable the University of Manitoba to take its rightful place in the cultural life of the community.

Manitoba's Medical School

The Manitoba Medical College may be said to owe its origin to the importunity of the medical students. In 1882 Winnipeg was a pioneer prairie town, the famous boom was at its height, and there were tremendous hopes for the future. A group of intending medical students, headed by John Fawcett, Principal of the High School, called upon Dr. Agnew and requested him, as one time Professor of the Principles and Practice of Medicine at Victoria College, Toronto, to take steps to commence medical teaching in Winnipeg. As a result, a meeting of the College of Physicians and Surgeons of Manitoba was held to discuss this proposal, but it was decided that the time had not yet come for the establishment of a medical school in Winnipeg.

In July, 1883, a young doctor, scion of a distinguished family, arrived from Toronto and announced his intention to start a proprietary medical school. This project was energetically resisted by the doctors resident in the city, the leader being Dr. James Kerr. Dr. Kerr was a colourful personality. A native of Antrim County, he had taken part in the Ashanti campaign under Sir Garnet Wolseley, in 1874-5, was a close friend of Osler and Shepherd of McGill, and a disciple of Lister. In the controversy over the medical school he maintained two principles, first that the established practitioners should be the founders, and second that the granting of degrees should rest solely with the University and not with the Medical School. After a two months' fight agreement was reached among the medical practitioners, and the legislature of Manitoba was requested to grant a charter incorporating the Manitoba Medical College. Thirteen physicians headed by Dr. Kerr, were named as incorporators.

The intention of the medical profession was that, once they had obtained a charter which would preclude the starting of other medical schools in the province, nothing would be done until a more opportune time. Once more, however, the medical students came upon the scene, and, pointing out the hardships and expense consequent upon their attendance at medical schools in Toronto or Montreal, requested earnestly that the school be opened that fall. Circumstances did not seem auspicious, but the insistence of the students prevailed and, after many difficulties had been surmounted, Dr. Kerr, who had been chosen Dean, delivered the introductory lecture on November 15, 1883. In that lecture the professors in the primary subjects were announced as follows: Anatomy, Drs. Codd and Blanchard; Materia Medica, Dr. R. G. Brett; Chemistry, Mr. John Fawcett, B.A.; Physiology, Dr. A. H. Ferguson. A word or two concerning the subsequent careers of some of these men may not be out of place.



MANITOBA MEDICAL COLLEGE
FACULTY OF MEDICINE, UNIVERSITY OF MANITOBA

Dr. Blanchard, who with Dr. John Stewart of Halifax had been one of Lister's dressers at Edinburgh, became a leading surgeon of western Canada, a president of the Canadian Medical Association, and died in September, 1928, universally beloved. Dr. R. G. Brett moved to Banff in 1886, established a sanitarium at the sulphur springs, interested himself in public life, became

Lieutenant-Governor of Alberta and died September 16, 1929. Dr. A. H. Ferguson, after a notable career as a surgeon in Winnipeg, moved to Chicago, where in this wider sphere he made a notable name, particularly in the field of hernia.

At first the school had no settled abode and various places were utilized. In 1884 the Faculty put their hands into their pockets and arranged for the building of a school at McDermot and Kate Streets, not far from the General Hospital. In this building, with additions, work was carried on until 1906, when a building was erected on the present site immediately to the west of the General Hospital.

In 1887, Dr. Kerr moved to Washington, D.C., and Dr. J. W. Good, one of the first in Canada to specialize in diseases of the eye, ear, nose and throat, was appointed Dean in his stead. In 1900, Dr. Good having joined the 'Trail of '98' to the Yukon, Dr. H. H. Chown, a distinguished graduate of Queen's University, succeeded him and held office until 1917, when he became a member of the first Board of Governors of the University. Dr. S. W. Prowse, a native of Prince Edward Island, a graduate in Medicine of Edinburgh University, and in 1917 the Commanding Officer of a Casualty Clearing Station in France, was appointed Dean and still holds that office. During all these years the college had been self-supporting, owing to the disinterested action of the Faculty, with the exception of the full time professors, in refusing to accept any remuneration. Up to 1918 the Medical School, though a constituent college of the University, and though all medical degrees were granted by the body, could at any time have withdrawn from the University. The unselfish and statesmanlike policy of Dr. Chown led to the College becoming, in 1918, an integral part of the University, deeding its unencumbered property and equipment to the larger body on condition that the University establish a Faculty of Medicine and carry on the work of medical education in an efficient manner. The College then became the Faculty of Medicine of the University of Manitoba.

At the present time 275 students are registered, and since 1923 the school has had Class A rating. The course lasts five years, four years being spent in class work, while the fifth is a purely clinical year, the student being an interne at a recognized hospital. Graduates of the school may justly feel a thrill of pride in reflecting that from humble beginnings their Alma Mater is now recognized as one of the leading medical Schools of the Dominion.

WINNIPEG — ITS EARLY HISTORY AND INDUSTRIAL DEVELOPMENT

HISTORY BY PERCY G. BELL, M.D., WINNIPEG
INDUSTRIAL DEVELOPMENT BY STEINA SOMMERVILLE, WINNIPEG

WINNIPEG owes its situation to the junction of two rivers. In the post-glacial period Lake Agassiz covered what is now Manitoba as well as parts of Saskatchewan, Western Ontario, North Dakota, and Minnesota. Since the ice-belt at the north of the lake prevented the passage of the waters into Hudson Bay, the great basin spilled southward by the Red River Valley, and reached the Mississippi. The old beaches of Lake Agassiz are still plainly to be seen, and the finer deposits offshore make some of the flattest and most fertile prairies. The final separation of the ice sheets permitted the waters to flow north-east, but remnants of Lake Agassiz still remain to form Lake Winnipeg and other Manitoba lakes. The Red River, which in former days flowed southward, now flows northward into Lake Winnipeg, which in turn drains by the Nelson River into Hudson Bay. The Assiniboine River, rising in Saskatchewan, flows eastward and joins the Red River forty miles above Lake Winnipeg. With these points in mind the reader will appreciate the topography of the country about Winnipeg, and the meanderings of the two rivers.

So far as is known, the first white man to reach the spot where Winnipeg now stands was La Vérendrye, a native of Three Rivers, Quebec, who saw service in America and Newfoundland, and fought at the battle of Malplaquet, where, with nine wounds, he was left for dead on the field. Still seeking adventure in the peace that followed, he returned to Canada, and in 1738 voyaged by water from Montreal to discover a route to the Western Seas and to open up, for France, trade with the Indians of the plains. Travelling up the Red River from Lake Winnipeg, he reached the Assiniboine and passed up the latter to establish Fort La Reine near the present town of Portage la Prairie. He was shortly joined there by De Lamarque, one of the party, who had meanwhile built at the confluence of the rivers a small post called Fort Rouge. A suburb of Winnipeg still bears this name.

Some years after the British conquered Canada the North-West Company of Montreal pushed forward from their post at Fort William on Lake Superior, and passing over La Vérendrye's route, established several trading posts from about 1780 onwards. In 1807 one of these, called Fort Gibraltar, was erected at the junction of the Red and Assiniboine rivers.

Following the year 1800, "the Governor and Company of Adventurers of England trading into Hudson's Bay," who had for over a century been extending their huge dominion from the Bay, established posts on the Red and Assiniboine Rivers. In 1811 this company conceded to the Earl of Selkirk the privilege of placing a colony on the Red River, granting him for this purpose some 116,000 square miles of the surrounding country. The first of these settlers sailed from Stornoway, Scotland, in 1811, and wintered at York Factory on Hudson Bay, continuing a journey of much suffering and hardship to reach their destination in 1812.

For years there had been bitter trade opposition and personal animus between the men of the North-West Company and those of the Hudson Bay Company. The advent of the Selkirk settlers intensified this feeling, and the North-West Company made it known that they intended driving the settlers out, since land settlement was detrimental to fur trading. The culmination of the feud was the tragedy of Seven Oaks, when Governor Semple of the Hudson Bay Company and a score of Selkirk settlers were killed. A monument marks this spot.

In 1821 the two great companies amalgamated under the title of the Hudson Bay Company. The next year Fort Gibraltar, which had been destroyed, was rebuilt and christened Fort Garry. It stood until 1882, when it was pulled down, with the exception of the north gateway, which has been preserved in a small park. In 1831 the company commenced building Lower Fort Garry, twenty miles further down the Red River. This stone fort, with its buildings, wall bastions, and many interesting relics, happily has been preserved, and forms a link with the past.

In 1869-70 occurred the first Riel rebellion. The French half-breeds, protesting against the surrender of the rights of the Hudson Bay Company involved in Canadian Confederation, formed a provisional government. Riel seized Upper Fort Garry and terrorized the people of the district until forced to fly to the United States by the arrival of the Wolseley expedition. This force consisted of the 60th Rifles and other English Regulars, together with Canadian Militia from Eastern Canada. The troops were quartered for some time in the Lower Fort.



RED RIVER SETTLEMENT, 1868, WHICH GREW INTO THE CITY OF WINNIPEG
(Courtesy of J. H. Ashdown Co.)

Nor was this the first time that English troops had been in the Fort Garry settlement; for in 1846 Colonel Crofton, with some 400 men, including a wing of the 6th Foot and detachments of artillery and Royal Engineers, had been dispatched at the request of the Hudson Bay Company, owing to the threat of war between Great Britain and the United States over the Oregon boundary question. The force remained for a year, and following this some British pensioners were sent out, many of whom remained in the country.

The village of Fort Garry was incorporated as the City of Winnipeg in 1873, and since then its growth has been steady, accelerated in 1883 by the arrival of the main line of the Canadian Pacific Railway, gradually followed by other lines, including the Canadian National Transcontinental. The earlier settlers came from Ontario, while later settlers came from the British Isles, the United States, and European countries.

For a quarter of a century Winnipeg metaphorically carried its eggs in one basket. The basic industry of the Canadian West was agriculture, and with the success or failure of the crops the city's prosperity rose and fell. In recent years, however, the yield of the soil has ceased to be all-important. The development of hydro-electric power, the discovery of minerals in the northern part of Manitoba, and the completion of the long-discussed railway line to Hudson Bay have directed activities into new channels.

Winnipeg is naturally the hub of all industrial activity for the province, and by the way it has gone ahead in the last five years it reflects the general progress made by Manitoba as a whole. Material contributory factors have been the great development of hydro-electric power; mining activity, which includes investment of tens of millions of dollars, particularly in the north country; railway expansion, giving access to new territory and fresh resources; increase in industrial development with mounting pay rolls; and greater returns from agriculture through diversification in farming.

Winnipeg is also the centre of the grain trade of the whole country, as well as of many of the allied industries which have developed. Here are located the great selling agencies of the West's grain crop, the Wheat Pool, and the Winnipeg Grain Exchange, which divide the handling about equally between them. It is the seat of the Canada Grain Commission, which is responsible to the Dominion Government for the administration and interpretation of the Canada Grain Act. The bulk of the grain is inspected at this point for grade standards in the largest and most important plant of the kind in the world. And from this centre the transportation departments of the two great railway systems direct the gigantic task of moving the crop each year.

Brief comment on the leading activities of Manitoba and its capital city may not be without interest. The only commodity it paid the earliest settlers to "pack out" was fur, and it was not until after 1870 that wheat began to be thought of as an export. Indeed, the very fertility of the soil was seriously questioned up to that time except along the silt-enriched banks of rivers. Neither was the fluidity of grain recognized, and men transported the early crops in jute bags. Other methods of handling were equally laborious.

The advent of the railroad made export both possible and profitable, and rapidly mounting growth in production was met by the gradual evolution of the most complete bulk handling system, participated in by the banks, the transportation companies (rail and navigation), the Government, and the grain trade. Proper handling has meant the provision of enormous storage capacity, with facilities for weighing, scouring, cleaning, drying, special binning; and efficient loading. It has meant the training of thousands of persons for the diverse phases of handling from the time the grain leaves the farmer's wagon-box until it passes out of the country. The heart of all this activity is Winnipeg.

Wheat production in 1928 reached the high mark of considerably more than half a billion bushels, and elevator storage capacity stood at nearly half that figure, including harbour front terminals as well as the interior elevators into which the farmer weighs. The Wheat Pool last year erected a handsome new headquarters for its central selling agency at Winnipeg. In 1928 the Winnipeg Grain Exchange thrust out a new half-million-dollar wing, and is again cramped for trading space. It is the largest cash grain market in the world where the greater part of the trading is backed up by the actual grain. The bulk of the 1928 export of grain—almost half of what the whole world consumed—was handled through Winnipeg.

The story of persistent research and experimentation in connection with the evolving of an all-round suitable kind of grain is a romance in itself, which can barely be touched upon. Some years ago three heads of wheat were saved by an Ontario farmer, out of a sample of seed grain sent him from Scotland, and since traced to the Ukraine. These three heads became the ancestors of "Red Fife," which in turn, bred and crossed with Russian and other hardy northern varieties, brought forth "Marquis" wheat, the present standard. "Marquis," whilst of excellent milling quality, early maturing, and frost-resistant, is not "rust" proof, and so a fresh

intensive research is going on at the present time in the Government Rust Research Bureau, located at Manitoba Agricultural College, for a variety which shall retain all the good qualities of "Marquis" and be rust-resistant as well. Success in this instance will mean a saving of untold millions to the country.



PRIMITIVE TRANSPORT—A RED RIVER CART
FROM AN ACTUAL PHOTOGRAPH

(Courtesy of J. H. Ashdown Co.)

The rapid increase in industrial production in Manitoba, which last year surpassed agricultural production by 10,000,000 dollars, is due in the main to one great economic factor—the development of plentiful and cheap hydro-electric power. Besides the benefits accruing to the city from the added pay rolls, it has become the first electrical city of the world, with an average of 3,384 kilowatt hours' annual consumption per residence. The cost is the lowest on record—a shade above three-quarters of a cent per kilowatt hour, as against an average cost of 7.16 cents in 172 representative American cities. Towns and villages throughout the province are rapidly being supplied with power, and the erection of transmission lines is keeping pace with the harnessing of waterfalls. Pulp and paper mills are included among the industrial enterprises which have followed in the wake of power production.

The total resources of the province in hydro-electric power are placed at 5,000,000 horse power, of which 3,000,000 are on the Nelson River, convenient to the mining belt of the north, and 800,000 on the Winnipeg River, within easy transmission of Winnipeg. The total development, so far, consists of three sites on the Winnipeg River, producing 308,000 horse power. Two other sites on the same river—Slave Falls with 90,000 horse power and Seven Sisters Falls with 225,000 horse power—are being developed, as well as one 50,000 horse-power hydro-electric plant in the northern mining area.

The full story of how the first of the equipment and machinery for the development of hydro-electric power was "packed" into the wilderness on the backs of men, of the overcoming of swamps and morasses, of mosquito-infested trails, of the excavating of thousands of tons of rock, and of the damming of lakes and rivers, may never be told as it deserves. But one thing is certain, and that is that the great waterfalls, beside which the toilers of an earlier era some-

times dropped dead under their 200-pound load per man during the portages, from now on will not be called "majestic and frightful," as Daniel Harmon said of them in his famous journal in 1800, but "majestic and useful."

The presence of valuable copper deposits along the Coppermine River on the Arctic border, has been known since the discoveries of Samuel Hearne in 1771-72, but they are still inaccessible. Similarly, the buffalo hunters who rode the trails on the great hunts in the fifties and sixties, knew of the lignite deposits in the Souris Valley on the south-western Manitoba border, but it was not until the railroad came that the knowledge could be put to general use. Something less than one-fifth of the surface of this province is arable, leaving an immense area in which it was possible to prospect for minerals, metallic and non-metallic, and yet it is a bare eighteen years since the beginning of Manitoba's metal-mining development, although production of non-metallics commenced earlier.

The returns from metallics have not been large so far, and will not be until the great plants, now being erected at enormous cost in the hinterlands of the province, bring the properties they are designed to serve into production. The largest of these are the Flin Flon and the Sherritt Gordon properties north of The Pas near the Saskatchewan border. The Hudson Bay Railway cutting through this region is now an accomplished fact after more than forty years of "talk," and branch lines from it connect with both these properties. The Island Falls power site, ninety miles distant, now under development, will furnish the needful power.

When the Flin Flon mine is brought into production 3,000 tons of ore will be treated daily, with an approximate annual production of 30,000,000 pounds of copper and 50,000,000 pounds of zinc, as well as values in gold and silver, according to information supplied by the industrial development department of the Canadian Pacific Railway. A concentrator and smelter is now being erected to treat these ores. The Sherritt Gordon property, which is a near neighbour, will have a higher yield per ton, and contains copper-zinc ore with values in gold and silver also. A 1,500-ton concentrator is under construction on the property, while the copper concentrates will be smelted at the Flin Flon smelter. The "Mandy" is another property in the same area from which considerable high-grade ore was taken in 1917-19, with diamond drilling under way at present for the location of further ore bodies.

In the southern Manitoba mining field the Central Manitoba Mines is the only producing concern at present. A 150-ton mill has been in operation here since 1927, and gold to the value of 770,483 dollars was shipped to the mint at Ottawa last September. Hydro-electric power from Great Falls on the Winnipeg River supplies this plant. Other mines in this area, where developmental work is now taking place, are the San Antonio and the Gem Lake. Minerals, other than those named above, which have been discovered in the province are tin, silver, arsenic, cobalt, iron, lead, nickel, molybdenite, tungsten, and beryllium.

For some time past the province has had a very real asset in the non-metallic minerals, which have been responsible for more than 75 per cent. of the mineral production to date. Of these, the group of structural and building material is the most important. First in rank is building stone (Tyndall stone), which is a limestone quarried thirty miles east of Winnipeg, and of so high a quality that it is being shipped to all parts of Canada. It is seen in Manitoba's public buildings and many of its business houses. The brick and tile industry is also important; gypsum has been produced for a number of years; and sand, suitable for glass manufacturing and moulding, is also available in large quantities.

A discovery which may be of considerable importance commercially is that of large quantities of lithium ore along the Winnipeg River, near the Ontario boundary. Considerable development of this find has already taken place, and ore has been shipped to Europe for extracting the lithium. The discovery has brought Manitoba conspicuously before other parts of the world in view of the fact that here is one of the largest sources of supply of a non-metallic mineral whose uses are rapidly increasing. Other non-metallics found in the province are limestone, granite, marble, bentonite, feldspar, garnet, salt, peat, coal, oil and gas. There has, however, been very little production of any of the latter named.

A great deal of prospecting is now taking place, and it would not be surprising if new discoveries of first importance were made within the next few years, more especially in the non-metallic minerals in the northern part of the province.

ELEVATORS AT SUNSET

*(Lines suggested by sketch made by J. H. S.
for Ladies' Luncheon, Manitoba Agricultural
College, August 28th, 1930.)*

"The prairie's cenotaphs, raised to the corn
That needs must die before it could give life:
Not empty shrines, but filled with sunset toil,
Dawn's high emprise, and nation's sustenance,
Man's altars to the plains' eternities."

A. J. CAMPBELL,
Winnipeg.

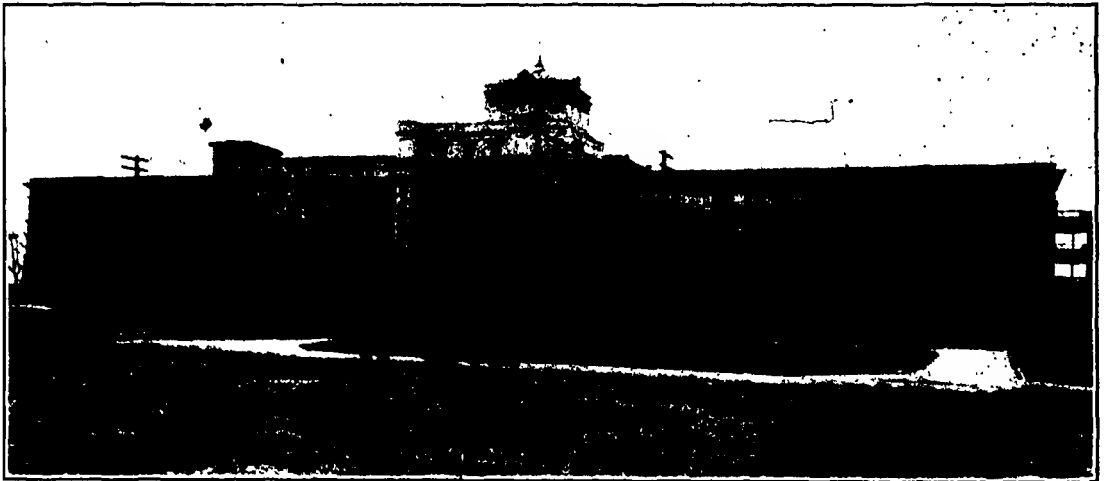
THE HOSPITALS AND NURSING SERVICES OF GREATER WINNIPEG

By ROSS MITCHELL, M.D., WINNIPEG

St. Boniface Hospital

TWO hospitals in Greater Winnipeg stand out with respect to age and size: the Winnipeg General Hospital and Hôpital St. Boniface—the former in the west end of Winnipeg, the latter on the east bank of the Red River, opposite the junction of the Red and Assiniboine Rivers. Hospitals were called into being after 1871, owing to the inrush of settlers following the purchase by Canada of Rupert's Land from the Hudson's Bay Company, and the coming of Lord Wolseley's expedition to quiet the disturbances incident to the change of government necessitated by the creation of the new province of Manitoba.

Even before that date there had been organized care of the sick. At midnight on June 30th, 1844, four sisters of the Grey Nuns of Montreal arrived at St. Boniface in a bark canoe. Almost from the time of their arrival they entered upon their duties of teaching orphans and caring for the sick. Their proper title is Les Sœurs de la Charité de l'Hôpital Général de Montreal, but from their costume they are commonly known as the Grey Nuns. In 1871 they had managed to acquire sufficient funds to build a hospital which would accommodate four patients. In 1877 they acquired a large house which could accommodate ten patients. The demand for beds increased so rapidly that ten years later the corner stone of the present hospital was laid. This first building was of brick, and measured 80 feet by 40 feet. In 1893 a transept 140 feet by 50 feet was added. St. Roch's Hospital for infectious diseases was established in the same year. A south wing 223 feet by 36 feet was erected in 1905. In 1917 the central part of the building was enlarged. It has a fine front of Tyndall stone, is six stories high, and measures 167½ feet by 52 feet. In 1927 a residence for fourteen interns was built. In 1928 a fine residence to accommodate 166 nurses was erected, and in 1929 a still further addition to the hospital was made. At the present time the hospital contains six hundred beds, and is completely equipped. It is a teaching hospital of the University of Manitoba.



ST. BONIFACE HOSPITAL

The Grey Nuns owe their origin to the Venerable Marie-Marguerite Dufrost Lajemmerais (Madame d'Youville), a niece of La Vérendrye, and the Rev. Louis M. Normand du Faradon, one-time Superior of the Seminary of St. Sulpice of Ville Marie, now Montreal. The order was founded in 1738, when the first city of Canada was little more than a village nestling on an island at the edge of a limitless wilderness.

The Winnipeg General Hospital

The Winnipeg General Hospital is junior to St. Boniface Hospital only by a short time. In 1871 a meeting was called by Lieutenant-Governor Archibald, and among those who attended were the Hon. A. G. B. Bannatyne, the Hon. Alfred Boyd, and Dr. J. H. O'Donnell. At this meeting a Board of Health was formed, and steps were taken to begin hospital work immediately.

On December 13th, 1872, the Winnipeg General Hospital was organized, but it was not until May 14th, 1875, that provincial letters of incorporation were taken out, a step rendered necessary by an appeal to the Provincial Government for assistance.

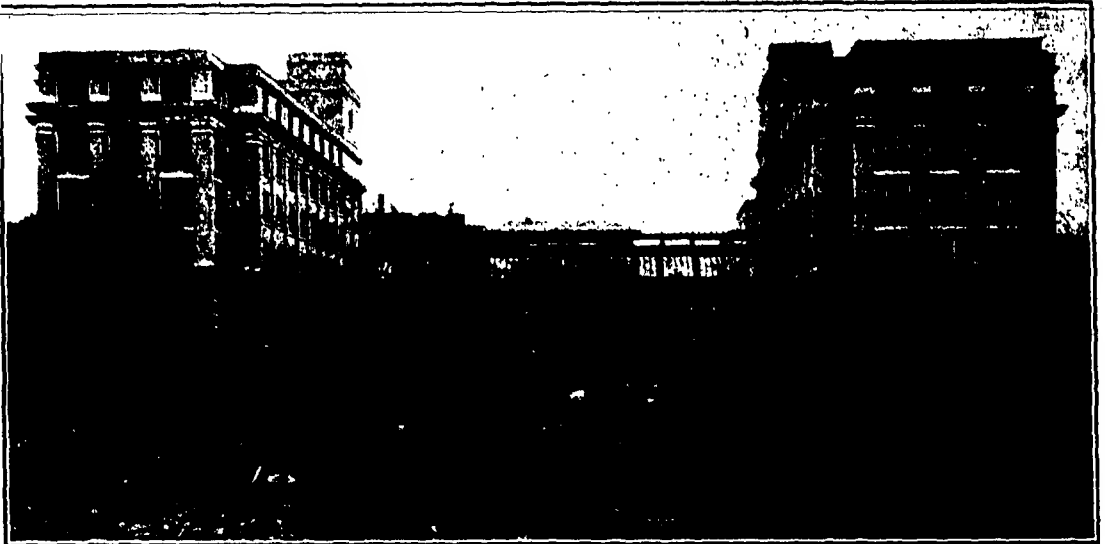
The first building occupied by the hospital was situated on the north-west corner of McDermot and Albert Street. This building had been occupied only two or three months when the hospital was moved to a house somewhere in the rear of the present Bank of Montreal, and afterwards to one on Notre Dame Avenue, owned by the late Dr. Schultz. From there it was moved to the bank of the Red River at a point south of Broadway on the present location of the Canadian National Railway. In 1875 the hospital was removed to Main Street North, to property owned by the late Hon. John Norquay. The sixth move was to a home owned by the hospital between Bannatyne and McDermot, close to the present location, on land donated by the late A. G. B. Bannatyne. This location was selected with a view to placing the institution in that portion of the city which would most centrally meet the needs of the future, and the site chosen proves the wisdom and forethought of those responsible for the conduct of the Winnipeg General Hospital in the early days. The buildings erected accommodated sixteen public ward patients and four private patients, and had a small operating room.

With the beginning of the C.P.R. construction the large influx of settlers soon made the need for much greater accommodation apparent, and while arrangements were being made to collect funds for extensions the hospital was moved to the Dominion Government Immigration Hall on Point Douglas Common. It was decided that the lot that had been donated to the institution by the late A. G. B. Bannatyne and A. McDermot was not large enough, and this was exchanged for a block to the west of Olivia Street, and the adjoining block was purchased from the executors of the McDermot Estate for \$5,000.00. On this a building costing \$65,000 (£13,000) was erected and formally opened in 1884. The preponderance of males among the patients showed that Winnipeg was still a pioneer city, the proportion of males to females being ten to one.

A Nurses' Home and Maternity Department were added in 1888, and the Isolation Hospital was built in 1892. The growth of the city soon made further accommodation absolutely necessary, and in 1897 arrangements were made for the erection of a surgical wing, which was opened in 1899, and in 1904 a wing was erected at the east end of the medical building and the administration portion was remodelled.

In 1906 Bannatyne Avenue in front of the hospital was diverted to form a crescent so as to increase the site of the hospital, and the vacant square to the north was converted into a park, which provides a pleasant recreational area for convalescent patients. The full tide of immigration into the West between 1910 and 1912 was

reflected in the expansion of the General Hospital at that time. New buildings, shown in the illustration, and providing accommodation for 250 beds, were completed in 1913.



WINNIPEG GENERAL HOSPITAL

The Winnipeg General Hospital was the first Canadian hospital to organize a social service department. This was in 1910. In 1919 a psychopathic ward was opened, and in 1922 an additional nurses' home. The first graduating class of nurses wrote their examinations in 1889. Since that time over 1,100 nurses have graduated from the hospital training school. The Medical College, which houses the Medical Faculty of the University of Manitoba, lies immediately to the west, and is connected with the hospital buildings by an underground passage. The General Hospital is practically the University hospital, and during its fifty years' existence more than 850 graduates in medicine have passed through its halls. These largely provide the medical service for Western Canada.

The hospital has accommodation for 700 beds. There is a large private service open to the patients of any reputable physician or surgeon in the community, and a public service under the care of the honorary attending staff, numbering thirty-two. The department for out-patients is very large, and an honorary staff of forty-five doctors minister to their ills.

The Tuberculosis Central Registry and Clinic

Up to the present the fight against tuberculosis in Manitoba—with the exception of King Edward Hospital, Winnipeg, for advanced cases, to which reference is made elsewhere—has been directed from the Manitoba Sanatorium at Ninette, 160 miles west of Winnipeg. In 1929 it was decided that since nearly half of the population of the province lies within a radius of ten miles of the Winnipeg City Hall, a Central Registry and Diagnostic Clinic should be established in the city. A brick building immediately to the east of the Winnipeg General Hospital was purchased, and is being remodelled. It will be connected by an underground passage with the

General Hospital. When alterations are completed the structure will be used as a diagnostic clinic and a registry of all known cases of tuberculosis and tuberculosis suspects in the province.

Misericordia Hospital

Third in point of size among the hospitals of Winnipeg is Misericordia Hospital. It is under the direction of the Institute of the Sisters "de Misericorde," which was founded in Montreal on May 1st, 1845, and canonically approved on January 16th, 1848. The objects of the Institute are to help in the moral rehabilitation of the unfortunate victims of a deceitful world, and to receive, nurse, and bring up the poor forlorn children. Its motto is "Misericordia derelictis." In 1898 a House of the Institute was established in Manitoba. Four sisters were brought out. Shortly after their arrival they bought land on Broadway, where they intended to lay the foundation of a permanent establishment. Unforeseen circumstances compelled them to abandon that site, and a new site was secured at the foot of Sherbrooke Street, close to Maryland Bridge over the Assiniboine. In 1900 the first part of the present structure was completed.

In 1907 the hospital was enlarged, and in 1912 the Asile Ritchot was built at St. Norbert to give shelter to 100 babies. In 1916 a training school for nurses was established, and the hospital, which at first had received only obstetrical cases, became a general hospital. In 1927 a large fireproof addition fronting on Wolseley Avenue was built. It contains splendidly equipped operating rooms and laboratories as well as wards, which bring the total capacity of the hospital to 225 beds.

The Children's Hospital

In 1906 the idea of starting a hospital exclusively for children was brought before the Local Council of Women. A committee of four was chosen, with power to add to their number. It was decided to open a hospital for children in a locality where the death rate was highest, and, until the venture had shown its value, to solicit no funds, but to raise them by their own personal efforts and the efforts of their friends. By running a teashop, bazaars, literary teas, selling paper violets on the streets, and in other ways these women finally secured sufficient funds to enable them to rent a large house. On February 8th, 1909, the hospital was opened with one baby patient, one superintendent, one maid-of-all-work, and a full staff of honorary physicians and surgeons. In that year 282 children were admitted and 546 new patients treated.

With the need of a hospital for the exclusive treatment of children established, a site of three and a half acres was procured on Aberdeen Avenue, overlooking the Red River. The present hospital was erected, and was opened for patients in November, 1911. It was formally opened in July, 1912, by H.R.H. the Duke of Connaught, and he and his consort became patrons of the hospital.

In 1916 a complete laundry unit was built, and in 1918 a nurses' residence. In 1925 the Shriners' Hospital for Crippled Children established a unit for the treatment of twenty patients by using one ward of the hospital. In 1928, by an addition, accommodation was provided for thirty-two. At the present time the hospital can accommodate 138 patients. The out-patient department is splendidly equipped with quartz lamps and other apparatus for phototherapy, supplied by the Kiwanis Service Club.

The Bureau of Child Hygiene

Adjoining the Children's Hospital is the Milk Dispensary owned by the City of Winnipeg and under the direction of the Bureau of Child Hygiene, a division of the Health Department. In 1912, the year prior to the institution of the Bureau of Child Hygiene, the

death rate of infants under 1 year was 207 per 1,000 live births. In 1928 the infant death rate was 63. The Bureau has three distinct services: the babies' clinic, milk dispensary, and visiting nurses. In the milk dispensary trained dietitians prepare the modified feedings prescribed by the clinic, the Children's Hospital, and private physicians. The clinic is open daily, except Sundays, from 9 a.m. to 5 p.m., for consultations, advice, and the weighing of babies. The nurses number fourteen—thirteen district nurses and one in attendance at the clinic.

Grace Hospital

Grace Hospital was organized in 1904 by the Salvation Army in order to care for unfortunate girls and to provide accommodation for maternity patients. It was incorporated in the same year by special Act of the Manitoba Legislature, and for a time work was carried on in a rented house on Young Street. In 1905 the corner stone of the first section of the hospital at the corner of Preston and Arlington Streets was laid by the Hon. R. P. Roblin, Premier of the province. In 1911 the hospital was considerably enlarged, and in 1927 a fully modern building, of fireproof construction, four stories in height, and fronting on Arlington Street, was opened by Lady Willingdon, wife of the Governor-General of Canada. The three lower floors contain wards and nurseries, while on the fourth floor are waiting rooms, labour rooms, and operating rooms with the latest equipment. With this addition Grace Hospital now contains 140 beds for patients, and also accommodation for sixty girls, as rescue work among the unfortunate has always been part of the work of the Salvation Army.

Victoria Hospital

Victoria Hospital, on River Avenue in Fort Rouge, was built in 1912 by the late Dr. Thomas Beath. A few years previously Dr. Beath had built and operated a hospital on Bannatyne Avenue near the Winnipeg General Hospital. This structure, a wooden building, was later used for a short time by the City of Winnipeg as a hospital for infectious diseases.

Victoria Hospital is seven stories in height, of reinforced concrete and brick construction, and has accommodation for 103 adult patients and 18 babies in the five floors used for hospital purposes. The nurses' home, a solid brick building, adjoins the hospital, while across River Avenue is the Annex, a brick veneered building. This provides quarters for the social service home and for hospital attendants. The hospital is general, and accepts all cases which are not contagious or infectious. It is an "open" hospital in which any registered physician of good standing may attend his cases. Dr. Beath was managing director until 1919, when he resigned on account of ill health. The present direction of the hospital is vested in a board of directors, with Dr. J. R. Thomson as managing director.

St. Joseph's Hospital

St. Joseph's Hospital, Winnipeg, conducted by the Sisters of St. Joseph, is situated on the corner of Salter Street and Pritchard Avenue, North Winnipeg; it was built in 1918, and operated as a private hospital until June, 1923, when it was taken over by the Sisters of St. Joseph of Toronto, and immediately converted into a general hospital of fifty beds; in September of the same year a training school for nurses was opened.

In January, 1927, a new unit containing operating rooms and private and ward accommodation was opened, and a staff of attending doctors was formed for the departments of surgery, medicine, gynaecology, obstetrics, and eye, ear, nose, and throat. A radiologist and pathologist have since been appointed. In the same year an out-patient department was opened. The training school for

nurses is under the direct supervision of the Sisters of St. Joseph, and is affiliated with the King George and King Edward Hospitals for communicable diseases.

The Order of the Sisters of St. Joseph was established at Le Puy, France, October 15th, 1850, by Mgr. Henri de Maupas, Bishop of Le Puy. In 1836 the first American foundation was made from the community at Lyons, France; and on October 7th, 1851, the first Canadian foundation was made at Toronto, Ontario. The special purpose of the Congregation of the Sisters of St. Joseph is the instruction and Christian education of youth, and the direction of charitable works, such as orphanages, hospitals, and homes for the poor and aged.

The Municipal Hospitals

The municipal hospitals, comprising King George Hospital for acute communicable diseases, King Edward Hospital for advanced pulmonary tuberculosis, the Small-pox Annex, nurses' home, power house, and superintendent's residence, are grouped in the south end of the city in a twenty-five-acre park, triangular in shape, with the Red River forming the base of the triangle. King George Hospital has 200 beds, King Edward Hospital 100 beds, and the Small-pox Annex 30 beds.

Hospital service as a civic utility dates back to January, 1911, when the old Beath Hospital, on Bandatyne Avenue near the General Hospital, was purchased to provide for the cases of scarlet fever prevalent at that time. Five months later a temporary building for cases of advanced pulmonary tuberculosis was opened. This building was located on the site in the Riverview district mentioned in the previous paragraph. In July, 1912, King Edward Memorial Hospital was ready for occupancy, and in February, 1914, King George Hospital was opened. H.R.H. the Duke of Connaught opened the King Edward Memorial Hospital and laid the foundation stone of the King George Hospital on July 11th, 1912.

Sixteen training schools in Manitoba, Saskatchewan and Ontario send their student nurses to the municipal hospitals of Winnipeg for training in infectious diseases nursing. Medical students from the University of Manitoba also receive instruction here. The high standard reached by Winnipeg hospitals may be judged by the fact that all the hospitals come in the fully approved list of hospitals drawn up by the American College of Surgeons.

Mount Carmel Clinic

The Mount Carmel Clinic is the most recent of Winnipeg's institutions for ministering to the sick. Located in a fine brick building on the west bank of the Red River at Selkirk Avenue, east of Main, it is well situated to serve the adjacent thickly settled district. The clinic is maintained by voluntary contributions, and renders aid to the sick poor without distinction of race, creed, or nationality. It contains the latest equipment for diagnosis and treatment.

Winnipeg Health Department

Winnipeg has reason to be proud of its health department, which for a number of years has been under the direction of Dr. A. J. Douglas. As late as twenty-five years ago typhoid fever was prevalent and swelled the death rates. From 1904 onward energetic steps were taken to stamp out the disease, with the result that for the last ten years very few cases have developed within the city. The steps taken included an extensive campaign of education as to the means whereby the disease is transmitted, insistence upon sewer connexions, the abolition of outdoor privies, and the building of an aqueduct ninety-six and a half miles in length to bring a supply of purest water from Shoal Lake, an arm of the

Lake of the Woods. The fight against other communicable diseases has been waged with equal vigour. Reference is made elsewhere to the municipal hospitals, which provide accommodation for sufferers from diphtheria, scarlet fever, tuberculosis, small-pox, and other communicable diseases. The Bureau of Child Hygiene, mentioned earlier, comes under the survey of the Health Department. The death rate for the City of Winnipeg for the year 1927 was 8.29 per 1,000 population, and not the least among the factors which keep the death rate at a low figure is the Health Department.

The Victorian Order of Nurses

The Winnipeg Branch of the Victorian Order of Nurses, an organization which extends across Canada, is particularly strong and efficient. It has existed in Winnipeg for twenty-nine years, and has grown with the community. The staff consists of a supervisor and twelve nurses. The Order also has a list of women who can act as helpers in the home when the mother is ill. The nursing service of the Victorian Order is divided into two classes—district and hourly. In district nursing the fees charged for visits are on a sliding scale according to the patients' ability to pay, though the size of the fee does not regulate the service. One of the objects of the Order is to foster a spirit of independence and self-respect among its patients. In hourly nursing a fixed rate per hour is charged. This service is run on a self-supporting basis, and is in no way a charity. In times past the Winnipeg Branch has also done industrial nursing—that is, assuming the nursing care of the employees of large departmental stores and other organizations. While at the present this work is not being carried on, the Winnipeg Branch is prepared to resume it when conditions warrant.

In connexion with the district work the Victorian Order carries on an educational campaign, through pre-natal and post-natal clinics, a "well baby" clinic at St. James's, and home nursing and mothercraft classes.

The Victorian Order Dental Clinic is a boon to those who cannot afford to pay the full charges of a dentist. Some fifty dentists of the city generously give their services free to this clinic.

The headquarters of the Winnipeg Branch are in the Medical Arts Building, itself a splendid monument of medical enterprise and co-operation.

The Margaret Scott Nursing Mission

This mission is called "The Margaret Scott Nursing Mission of Winnipeg," in acknowledgment of the unselfish and self-sacrificing labours of Mrs. Scott for many years in ministering to the physical and spiritual needs of the sick poor of this city. It is supported by a society formed to perpetuate the work of Mrs. Scott, who, happily, is still living, though in delicate health. The Mission was organized a little over twenty-five years ago. The nurses' home is at 99, George Street, in the east end of the city, close to the Red River. The Mission is undenominational and ministers to the sick poor without making any charge. In 1928 the visits made numbered 27,864, of which a great proportion were to female patients, as maternity nursing forms a large part of the work. The nurses are usually twelve in number, including six student nurses from the Winnipeg General Hospital and two student nurses from the Children's Hospital, who come to the Mission for two months' experience in district nursing.

LOWER FORT GARRY

By 'PERCY G. BELL, M.D., WINNIPEG

IN 1670 King Charles II granted to Prince Rupert and his "Company of Adventurers of England trading into Hudson's Bay" a charter giving dominion over a territory whose vastness was to become apparent with time. Hardly had the young Company established its first posts on the Bay when it found itself in conflict with the French, who also laid claim to the region. In 1686 French ships captured four posts, and these changed hands later on several occasions. The treaty of Utrecht, 1713, ushered in a period of half a century of prosperity, during which the Company gradually pushed its factories farther inland.

Tribulation again came during the French War of 1778-83, when a squadron under La Pérouse wrought grievous damage. After Canada became English the domain of the Company, now extending from the Arctic on the north to the Pacific on the west, also became accessible from the south. So profitable a monopoly could not long be enjoyed. Rivals entered the field, chief among them the famous Northwest Company of Montreal, with its flourishing outposts on Lake Superior. Before the year 1800 this Company had established several posts in the vicinity of the Red and Assiniboine Rivers, to gain command of these canoe routes, thus opening up hundreds of miles of trading country. In 1807 Fort Gibraltar was built, the headquarters of the fur trade on the Red, Assiniboine and Qu'Appelle Rivers, and also later the base of operations against the Hudson's Bay Company, following the establishment of the Selkirk Colony in 1812. There followed some years of strife, of "pemmican wars," of raids on trading posts, and finally of bloodshed, until the two companies amalgamated as the Hudson's Bay Company in 1821.

Fort Gibraltar, situated at the forks of the rivers, on ground now covered by the City of Winnipeg, was rebuilt and christened Fort Garry, in honour of Nicholas Garry, Deputy Governor of the Company from 1822 to 1835. Like many of the "forts" of the trading companies, it seems to have consisted of a few wooden buildings very poorly protected. A description of it, written in 1825 by Alexander Ross on his arrival at the Red River from British Columbia via the fur-trader's overland route, says: "I was anxious to see the place, and had heard so much about it, but I must confess I felt disappointed. Instead of a place walled and fortified, as I had expected, I saw nothing but a few wooden houses huddled together, without palisades or any regard to taste or even comfort. To this cluster of huts were appended two long bastions in the same style as the other buildings."

In 1830, at the council meeting of the Company's Northern Department at York Factory, this resolution was passed: "The establishment of Fort Garry being in a very dilapidated state, its situation not sufficiently central, most exposed to the spring floods, and very inconvenient in regard to the navigation of the river, and in other points of view it is resolved, that a new establishment to bear the same name be founded on a site to be selected near the lower end of the rapids, for which purpose tradesmen be employed, or the work done by contract, as may be found most expedient, and, as stones and lime are on the spot, those materials to be used instead of timber, being cheaper and more durable. . . ."

No time was lost in furthering this project. A letter from Governor George Simpson, dated York Factory, July 18, 1831, states in part, "I therefore determined last Fall . . . to set about erecting a good solid comfortable establishment of stone and lime in such a situation as to be entirely out of the reach of high water . . . and accordingly selected the most eligible spot in the

settlement, about 20 miles below the present establishment, laid the plan, and commenced operations without loss of time and had the satisfaction of seeing the walls of the principal building nearly up before my departure and hope to see New Fort Garry (the only stone and lime, and I may add, the most respectable looking, establishment, in the Indian country) occupied next spring."



° LOWER FORT GARRY

(Courtesy of Royal Canadian Air Force and Hudson's Bay Company)

In October, 1831, men were set to dig foundations, quarry stone, and prepare timber, and the buildings were commenced on the west side of the Red River, some twenty miles below the forks, at a place where the bank is thirty feet high owing to an outcrop of limestone. A considerable forest across the river afforded the necessary timber.

During the summers of 1832 and 1833 a commodious dwelling house and a capacious store were finished, and Governor Simpson and family passed the winter of 1833 and 1834 at the stone fort. In 1839 a stone wall was commenced, designed as a defense! The stonemason responsible for the building of the walls and bastions of Lower Fort Garry was a Scot named Duncan McRae, who at the age of twenty-four years, in 1837, left Stornoway for service with the Hudson's Bay Company, reaching Fort Garry in the spring of 1838.

The banks of the Red River adjacent to St. Andrew's Rapids, and indeed, all the neighbourhood, were historic ground which man had trod for centuries. Scattered about near the river were hillocks of earth, relics of the Mound Builders, that strange race whose origin and fate are alike shrouded in mystery. In recent times an extensive kitchen-midden, containing bones, potsherds, and worked flints, was discovered as the spring high water wore away the eastern bank. Many of the fragments, by their depth, pointed to great antiquity. So far as is known, the first white man to gaze upon this scene was La Vérendrye, who in 1738 passed up the Red River on his canoe voyage from Montreal, to open up the country for trade with the Indians on behalf of France and to seek a route to the Pacific. Alexander Henry gives a description of its appearance in 1800: "At this spot (at the head of the Rapids) where there is a beautiful plain upon the west shore, which is more elevated than that of the east, formerly the Crees and Assiniboines were accustomed to assemble in large camps to await the arrival of the traders."

He found pelicans numerous in the rapids, and fish in the shoals frequented the spot, sturgeon, catfish, pike and goldeye. Moose, red deer, bears, wolves and foxes also abounded, while pigeons were in great numbers. Truly a sportsman's paradise!

Lower Fort Garry, known to men of its time as the "Stone Fort," may be said to be a monument to the union of the two great Companies. It became for a space the seat of government and flourished as an official and social centre under Sir George Simpson. It saw within its walls gatherings in council of the Company's servants from the Arctic Circle, from the Pacific, and from the posts on Hudson Bay. It was the annual site of meeting of the brigades of boats, when voyageur and Indian, factor and clerk, from far flung posts met, exchanged furs for merchandise, and held brief revelry before returning their ways.

In 1835 Upper Fort Garry was reconstructed of stone, and became the Company's head depot, as, with change in fortunes of the colony it was found more central and better adapted to the transaction of business.

An interesting glimpse of the two forts in 1856 is given by Alexander Ross in his book, "The Red River Settlement." "Upper Fort Garry," the seat of the Colony Governor, is a lively and attractive station, full of business and bustle. Here all affairs of the Colony are chiefly transacted, and here ladies wear their silken gowns and gentlemen their beaver hats. Its gay and imposing appearance makes it a delight of every visitor and a rendezvous of all comers and goers. Lower Fort Garry is more secluded; although picturesque, and full of rural beauty. Here, the Governor of Rupert's Land resides, when he passes any time in the colony. To those of studious and retired habits, it is preferred to the Upper Fort.

In 1846 Colonel Crofton came to the Fort, in command of a wing of the Sixth Foot together with Artillery and Engineers, and for a while acted as Governor during the Oregon Boundary dispute. The presence of this force lent picturesqueness to the life of the colony. A body of British Army pensioners was quartered in the Lower Fort in 1848, and nine years later came one hundred and twenty men of the Royal Canadian Rifles. In the Council House were settled the details of the Franklin Relief Expedition, which was conducted overland to the shores of the Arctic by Dr. Rae, an officer of the Hudson's Bay Company. The Lower Fort became the stronghold of the Loyalist party during the Riel rebellion, and was subjected to a brief raid one winter night by Riel, before he was forced from the country by the arrival of the Wolseley Expedition in 1870. Some of these soldiers were quartered for a time within its walls.

The way-farer of to-day, who takes the west Kildonan Road from Winnipeg, drives over the former trail of the Red River cart, now become a highway by the grace of taxes and the automobile. Passing through part of the Old Selkirk Settlement, he comes upon the Lower Fort, standing between the highway and the river, with its gateways opening to each. The limestone walls $7\frac{1}{4}$ feet high, form a quadrangle flanked at each corner by a bastion, with the whole loopholed for rifle-fire. Within, the old stone buildings, mellowed by a century of succeeding seasons, stand in a charming setting of lawn, flowers and trees. In this atmosphere of old world peace perchance the shades of the voyageurs stir again. No longer do the laden dog teams come and go—the creak of the Red River cart has long been stilled, and the York boat has vanished from the river. The rattle of a passing electric train echoes through the gateway, bringing the wayfarer back to the present:

"Farewell Romance. . . . yet all unseen,
Romance brings up the nine-fifteen."

TRAVELLING IN CANADA

By Miss HILDA HESSON, WINNIPEG

Hints for Visitors to the Winnipeg Meeting

SINCE travel in Canada differs in many respects from travel in the United Kingdom it is well for visitors to the Dominion in August to know something of the conditions that obtain at that time. For the following hints we are indebted to Miss Hilda Hesson, an experienced traveller, who has arranged tours in Europe in connexion with the Canadian Pacific Railway steamships.

Luggage and Clothes

On shipboard both men and women will require heavy clothing for the crossing, warm underwear, warm suits or dresses, comfortable coats, gloves, and a soft hat or cap. For the men dinner jackets will be found sufficient for evening occasions. Deck chairs and rugs may be rented for 10s. from the steward, or they may be engaged at the London office before sailing.

On arrival in Canada it will be found convenient to check steamer clothes in Montreal, to be placed on the home-going ship. Warm clothing will not be required in Canada during August and September. On the train from Montreal to Winnipeg one should wear only light clothing that can be readily cleaned. Dry cleaning is quickly and inexpensively done in Canada.

At Winnipeg an ordinary light-weight business suit is all that is required for general wear and sectional meetings. Golfers should bring appropriate dress, as there are many golf courses about Winnipeg. The usual morning coat, dinner jacket, and evening clothes are worn on official, semi-official, and social occasions. Academic dress, while not obligatory, is greatly desirable at the annual Religious Service, the President's Address and Reception, the University Convocation, and the Listerian Oration; on these occasions decorations may be worn.

Among the small things that make long-distance travel more comfortable are collapsible toilet cases, hook trouser hangers, collapsible aluminum shoe trees, and coat hangers.

Heavy luggage can be checked—that is, registered—on arrival at the docks in Montreal, through to Winnipeg. Checks presented on arrival there, at the baggage office in the railway station, will claim the luggage, which can then be sent direct to hotel or residence. Necessary luggage could be conveniently confined to a steamer wardrobe trunk, and a small kit-bag or suit-case for the train journey.

The Train Journey in Canada

Trains leaving Montreal will carry not only the regular Pullman sleeping cars, with upper and lower berths, but, in addition, compartment cars and observation cars. The Pullman cars have dressing rooms at either end, while the compartments (which also provide two berths) are small rooms, with toilet accommodation. The observation cars are for the use of all passengers, and contain libraries of magazines and books, which may be had on application to the porter. In the latest cars of this type shower-baths are provided, and arrangements can be made with the porter for pressing clothes. Shoes to be cleaned are placed outside the berths or compartments. The porter in charge of each car is coloured, and is always a reliable and obliging man. The customary tip to him on leaving the train is at the rate of a shilling a night per person. The conductor, in charge of the whole train, is the official who corresponds to the English guard. The chief steward is in charge of the dining car, where meals are served *a la carte*. "Red Caps," so called for their red headgear, meet all trains at important stations, and

carry passengers' hand baggage; the tip averages threepence to sixpence per bag, and a shilling is usually the maximum.

Meals and Hotel Accommodation

Meals in Canada differ from English meals in many respects. Breakfast begins with fresh fruit, and it is advisable to eat all the fruit and vegetables possible, and less meat than in England. Bacon and eggs are the usual breakfast dish, with toast and muffins. Lunch may consist of a soup, salad, and dessert. Tea or coffee is always offered with lunch in this country. Ices will be found very delectable, and are largely used in the summer. Water is always iced (unless by request), and is pure and good. Afternoon tea is not served as part of the routine in hotels, but can be obtained there always, and in numerous small tea-rooms throughout the cities. Dinner is usually eaten at seven o'clock, and no wines or liquors are served with meals in hotels in Canada, except in the province of Quebec. All liquors, however, can be obtained with a Government permit (costing four shillings), at the Government liquor stores, and can be taken to the hotel rooms. All the best-known brands of Scotch and Irish whiskies can be purchased here. The ale, locally made, is heavier than English ale.

Shoes are not placed outside the doors in Canadian hotels or private houses, but are cleaned by bootblacks in the barber shops or small bootblack shops scattered throughout the city. A hotel valet will press and clean visitors' clothes overnight. In the majority of private houses in Canada only one maid is kept, and there are therefore many small services which cannot be rendered as they are in England. Morning tea is not a custom of the country, but most guests will find they are offered it, and it can always be arranged for at the hotels.

Nearly all rooms in Canadian hotels have connecting bathrooms, and soap is always provided in trains and hotels without extra charge. The telephone is used for rapid communication, and every firm, and nearly every private individual, has a telephone in Canada; in fact, the telephone directories are used like the A B C's are in England. Telegrams are never sent locally. Letters to the British Isles and the United States take a two cent stamp.

Taxis are more expensive than in England, and if the cab is not provided with a meter it is well to ask the driver to state his price before engaging him. Definite routes have definite prices.

Equipment for Ladies

Ladies accompanying the party will find the following suggestions of help to them. Warm clothing, as outlined in paragraph 2, for the boat. Two plainly made, uncrushable dinner dresses, a warm evening wrap or shawl, and comfortable shoes and slippers will complete the necessities for the boat.

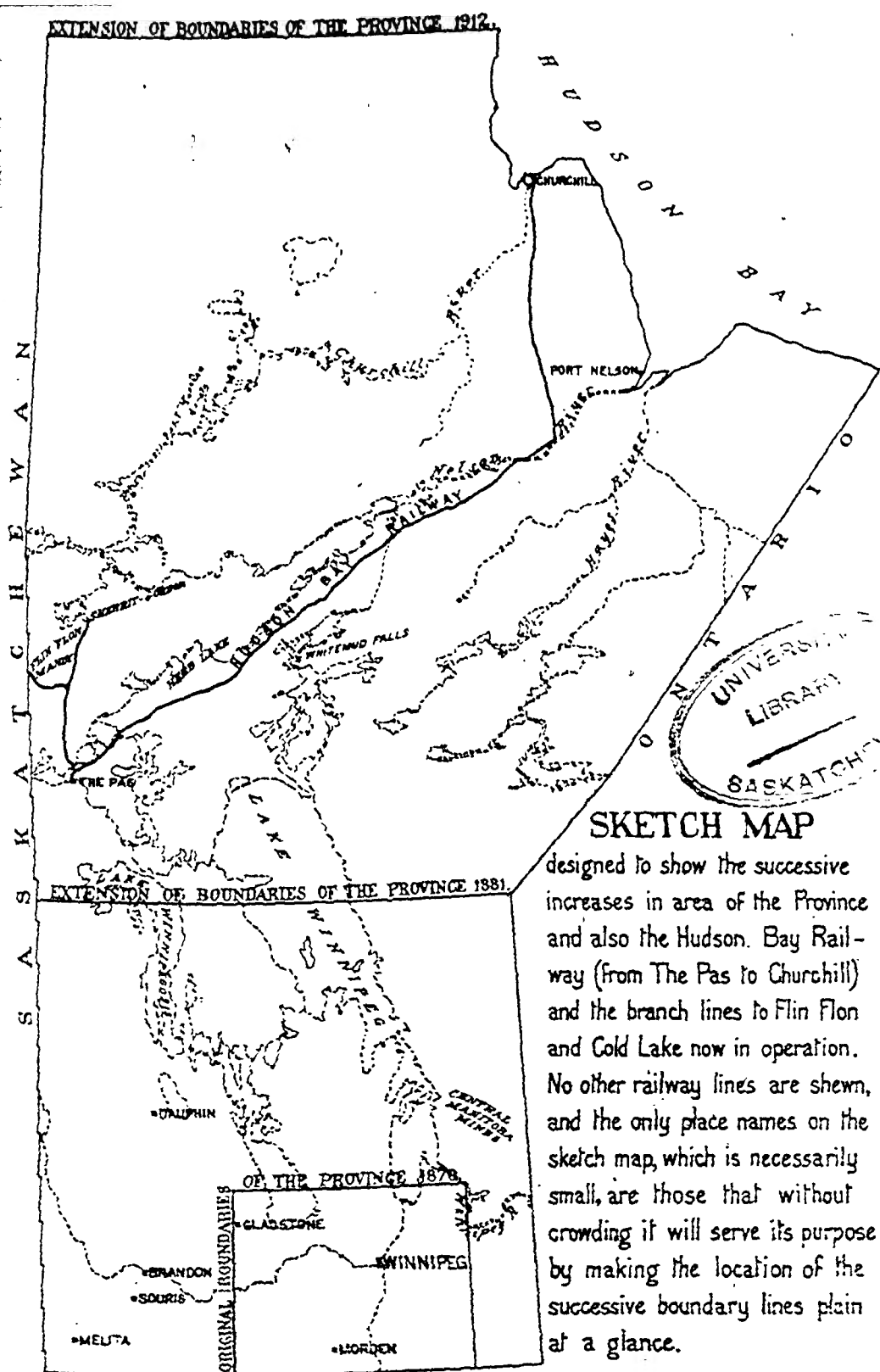
For train travel, a plain dark silk dress or suit is advisable. A figured foulard, a taffeta, or any of the fugi or fibre silks, is appropriate. Washable gloves, silk underwear, and a dark leather purse should accompany this. A small bag for toilet necessities will be found a comfort on the train. For a night journey dark silk pyjamas, a dark dressing-gown, and folding boudoir slippers are comfortable. It is customary in Canada for women to proceed through the Pullman car to the dressing-room in a dressing-gown, and a little practice will help travellers to become quite expert in dressing and undressing in their berths. They need have no fear of sleeping in these curtained niches; the linen is absolutely clean and sanitary, and each traveller is quite unseen by the other occupants of the car.

Wool sports clothes, or dark silk dresses, will be found appropriate for most occasions. One light-weight tweed coat or suit, an

evening wrap, a couple of evening dresses, and an afternoon dress of lace or georgette, a waterproof (mackintosh) and appropriate shoes, will be found adequate. If a shoe box is not carried, wrap each shoe in a chintz square, tied with tape; fold dresses over cardboard, and lay between layers of tissue paper. Canadian electric fixtures do not take English fittings, but flexible cord for travelling irons may be purchased in Canada. A good supply of gloves should be packed, but silk stockings should be bought after arrival. Canadian shoes are made on different lasts from English shoes, and will be found unsuitable for the average English foot.

Miss Hesson ends her note with the following advice: Do not bring expensive jewellery with you: it will only be a care when travelling. Take your money in travellers' cheques, as these will be found infinitely more convenient than a letter of credit. Carry a good-sized purse to hold passport, glasses, and cheque book. Bring dark glasses, Eno's fruit salt, a small sewing kit, smelling salts, a refreshing toilet water, cold cream, and cleansing tissues. Eat lightly while travelling, and you will enjoy the journey. I hope that these hints may help to make your travelling happy, and that you may find Canada, in her new ways, as interesting and friendly as we who know and love her find England.





(Courtesy The Provincial Librarian)